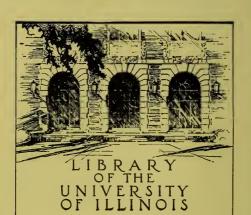


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# REPORT

OF THE

# FIRE DEPARTMENT

OF THE

## CITY OF NEW YORK

For the Three Months and Year ending December 31, 1887.

NEW YORK:

MARTIN B. BROWN, PRINTER AND STATIONER,

Nos. 49 and 51 Park Place.

1888.m

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# HEADQUARTERS FIRE DEPARTMENT, NOS. 157 AND 159 EAST SIXTY-SEVENTH STREET, NEW YORK, January 25, 1888.

#### To the Hon. ABRAM S. HEWITT,

## Mayor of New York:

SIR—We have the honor to submit herewith the report of the operations and actions of this Department for the quarter ending December 31, 1887, and for the year ending on the same date:

On May 10, the term of office of Commissioner Elward Smith having expired, Commissioner Richard Croker was appointed in his place for the term of six years from May 1, 1887.

# Number of each Grade of Officers and Employees on December 31.

#### Headquarters-

Commissioners	2
Secretary and Assistant Secretary	2
Medical Officers	3
Bookkeeper and Clerks	8
Janitor	I
Watchmen	2
Elevator Boy	I
Stokers	3
Scrub Women	2
_	

Bureau of Chief of Department—Uniformed force— In active service— Chief of Department	- I	
Assistant Chief of Department	2	
Chiefs of Battalion	12	
Foremen	82	
Assistant Foremen	87	
Engineers of Steamer545	125	
Firemen . Second Grade		
——————————————————————————————————————	651	
	960	
Pilots on Fire Steamers, (Engines 43 ( 4	900	
Engineers on Fire Steamers, and 51) Un-{ 2		
Stokers on Fire Steamers, uniformed. 6		
<del></del>	12	
	972	
*Relieved from service at fires—	,	
Foremen 5		
Assistant Foremen		
Engineers of Steamer 5		
Firemen		
Firemen, First Grade		
Private I	37	
		1,009
Bureau of Inspector of Combustibles—		, ,
Inspector of Combustibles	I	
Clerks	3	
Surveyors	3	
Oil Collectors	3	
Bureau of Fire Marshal—		10
Fire Marshal	I	
Assistant to Fire Marshal	I	
Clerks	3	
-		5

<sup>\*</sup> For disability, under section 14, chapter 742, Laws of 1871, as amended by chapter 119, Laws of 1879, and re-enacted by section 519, chapter 410, Laws of 1882.

Bureau of Inspection of Buildings—		
Superintendent of Buildings	I	
Deputy Superintendents of Buildings	2	
Clerks	19	
Inspectors of Buildings	26	
Messengers	4	
Driver	1	
Machinists to Supervise Elevators	2	
		5 5
Attorney to the Department		I
Fire Alarm Telegraph—	,	
Superintendent of Telegraph	I	
Chief Operator	ı	
Operators	4	
Assistant Operators	3	
Clerk	1	
Inspectors of Alarm Boxes	2	
Batteryman and Assistant Batteryman	2	
Foreman of Linemen	I	
Linemen	3	
		18
Repair Shops—		
Superintendent of Repairs to Buildings	I	
Foreman	I	
Storekeeper	I	
Clerks	2	
Messenger	I	
Shop Engineer	I	
Machinists	16	
Machinists' Helpers	5	
Boiler Maker	I	
Blacksmiths.	5	
Blacksmiths' Helpers	3	
Wheelwrights	6	
Wheelwrights' Helper	I	

Repair Shops—		
Harness Maker	2	
Harness Maker's Helper	I	
Hose Repairers	3	
Painters	5	
Watchmen	3	
Drivers	4	
Laborer	I	
Janitor	I	
Hospital Stables—	— <i>6</i>	)4
Foreman	I	
Stablemen	5	
		6
Aggregate	1,19	)2

Number of Changes by Resignation, Discharge, Death, Promotion, Appointment, etc., in each Grade.

	Loss By									GAIN BY				
Grade.	Expiration of Term.	Resignation.	Discharge.	Dismissal.	Promotion.	Death.	Assignment.	Total.	Appointment.	Promotion.	Restoration.	Assignment.	Total.	
Commissioners	1	1						2	ı				ı	
Assistant Secretary					1			τ		1	•••		1	
Clerks		2			1	2		5		2			2	
Second Assistant Chief of De-							1	1			1		1	
Chiefs of Battalion							τ	r				ı	1	
Foremen										4		x	5	
Assistant Foremen					4	r		5		8	••		8	
Engineers of Steamer				ı	2	3		6		13			13	
Firemen, First Grade		r		7	11	11		30		ııı			111	
" Second "		3		ı	113			117		54	)		54	
" Third "		r		3	60	r		65		47			47	

				Lo	GAIN BY								
Grade.		Resignation.	Discharge.	Dismissal.	Promotion.	Death.	Assignment.	Total.	Appointment.	Promotion.	Restoration.	Assignment.	Total.
Fireman						1		1					
Ununiformed Firemen		2			47			49	49				49
Pilot						r		1	1				1
Marine Engineer				2				2					
Stoker				ı		ı		2	4			1	5
Deputy Superintendent of Buildings										2			2
Inspectors of Buildings		2		6	1	ı		10	1				ı
Oil Collectors			1		1			2	2				2
Chief Machinist		1						1					
Machinists		ı		r		ı		3	2				2
Machinists' Helper		ı						1	1				1
Blacksmith									1				ı
Blacksmith's Helper							ı	1	ı				ı
Harness Maker's Helper												1	1
Hose Repairer									1				1
Hose Repairer's Helper							τ	ı					
Elevator Boy									1				1
Scrub Women						••			2				2
Totals		15		22	241	23	4	307	67	242		4	314

# Alterations in the Rules and Regulations.

DECEMBER 9, 1887.

(General Orders No. 1.)

The following amendment to the rules is hereby promulgated :

All appointees to membership in the uniformed force, and all members promoted to the grades of Assistant Foreman and Foreman, shall hereafter serve in companies located south of Twenty-fifth street for at least two years after such appoint-

ment or promotion, unless otherwise ordered by the Board, upon the recommendation of the Chief of Department.

# Appropriations and Expenditures.

TITLE OF APPROPRIATION.	AMOUNT OF APPROPRIATION.	Expenditures.	BALANCE.
For Salaries—			
Headquarters	\$43,875 co	\$42,722 17	\$1,152 83
Bureau Chief of Department	1,273,725 CO	1,272,182 30	1,542 70
" Inspector of Combustibles	12,200 00	12,192 30	7 79
" Fire Marshal	7,400 00	7,388 87	11 13
" Inspection of Buildings	77,550 00	74,697 67	2,852 33
Attorney	4,000 00	4,000 00	
Fire Alarm Telegraph	22,165 00	21,921 87	243 13
Repair Shops	55,000 00	54,999 00	1 00
Hospital Stables	4,850 00	4,816 00	34 00
Total salaries	\$1,500,765 00	\$1,494,920 18	\$5,844 42
For Apparatus, Supplies, etc.—			
Apparatus, horses, rents, supplies, etc	\$281,500 00	\$281,500 00	
New house for Fngine 54	17,000 00	17,000 00	
Furnishing new Headquarters	5,500 CO	5,500 00	******
Total apparatus, etc., etc	\$304,000 CO	\$304,000 00	
Grand total	\$1,804,765 00	\$1,798,520 18	\$5,844 82

Of the expenditures the following amounts were under contracts awarded upon proposals advertised for as provided by law:

## Apparatus, Supplies, etc.—

For forage	\$34,210 00
For fuel	20,800 00
For new fire-engines	8,350 00
" hose	30,750 00
" trucks	3,400 00

Apparatus, Supplies, etc.—  For new tenders  For telegraph cable	\$4,315 00 6,431 50
Total	\$108,256 50 15,750 00
Grand total	\$124,006 50
Amount of Bills and Pay-rolls Aua	
Bills for 1885	\$3,562 50
Bills for 1885	\$3,562 50
Bills for 1885	\$3,562 50 89,333 00
Bills for 1885	\$3,562 50 89,333 00 258,176 21

#### BUREAU CHIEF OF DEPARTMENT.

Company Organization, Complement of Officers and Men, Kind and Number of Apparatus and Horses, Number of Alarms Responded to, etc.

		Men.		Ar	PARA	TUS		d to.	y at.				
	COMPANY.	No. of Officers and M	No. of Steam Fire Engines.	No. of Horses.	No. of Four- wheel Tenders.	No. of Horses.	No. of Two- wheei Tenders.	No. of Horses.	No. of Hook and Ladder Trucks.	No. of Horses.	Total No. of Horses.	No. of Alarms Responded	No. of Fires Performed Duty at.
Engine	r	12	1	2	ı	2					4	133	51
"	2	12	ı	2			I	1			3	112	41
66	3	12	I	2	1	2					4	98	25
66	4	12	1	2			1	I			3	137	55
66	5	*18	2	4			2	2			6	153	52

<sup>\*</sup> Double companies.

		en.		Ap	PĀRA	rus .	AND ]	Hors	SES.			d to.	ty at.
	COMPANY.	No. of Officers and Men.	No. of Steam Fire Engines.	No. of Horses.	No. of Four- wheel Tenders.	No. of Horses.	No. of Two- wheel Tenders.	No. of Horses.	No. of Hook and Ladder Trucks.	No. of Horses.	Total No. of Horses.	No. of Alarms Responded	No. of Fires Performed Duty at.
Engine	6	12	1	2			1	1			3	91	36
44	7	16	1	2			1	1	†ı	2	5	198	72
"	8	12	1	2	1	2					4	146	48
66	9	12	I	2			1	1			3	234	79
66	10	12	1	2	1	2					4	56	23
66	11	12	1	2	1	2					4	155	56
46	12	*18	2	4			2	2			6	187	76
44	13	*18	2	4			2	2			6	227	93
66	14	12	1	2	1	2					4	148	65
6.6	15	τ2	1	2			1	1	••		3	τ86	57
66	16	*18	2	4	1	2	1	1			7	148	38
6.6	17	12	1	2			1	1			3	301	81
66	18	*18	2	4	I	2	1	1			7	119	36
44	19	12	1	2	I	2					4	97	30
6.6	20	12	1	2			I	1			3	249	100
6.6	21	12	1	2	1	2					4	124	41
46	22	12	1	2	1	2					4	119	23
"	23	12	1	2	1	2					4	128	37
41	24	12	1	2	1	2					4	108	41
٠.	25	12	ı	2			1	1			3	188	56
64	26	*18	2	4	1	2	1	1			7	148	48
66	27	*18	2	4	1	2	I	1			7	151	77
66	28	12	ı	2			1	1			3	97	27
44	29	12	1	2			ı	1			3	120	51
44	30	12	1	2	1	2					4	155	60
46	31	*18	2	4			2	2			6	193	93
44	32	12	ı	2			1	ı			3	113	55
4.6	33	*18	2	4			2	2			6	187	74
"	34	12	1	2	I	2					4	133	41
6.6	35	12	1	2		١	1	1			3	132	37

<sup>\*</sup> Double companies.

<sup>†</sup> Water tower in addition to other apparatus.

	1	fen.		Ap	PARA	rus .	AND	Hors	SES.			d to.	y at.
	Company.	No. of Officers and Men.	No. of Steam Fire Engines.	No. of Horses.	No. of Four- wheel Tenders.	No. of Horses.	No. of Two- wheel Tenders.	No. of Horses.	No. of Hook and Ladder Trucks.	No. of Horses.	Total No. of Horses.	No. of Alarms Responded to.	No. of Fires Performed Duty at.
Engine	36	12	ı	2	1	2					4	128	23
66	37 · · · · · · · · · · · · · · · · · · ·	‡14	ı	2	ı	2					4	56	15
66	38	12	I	2	1	I			ı	2	5	40	15
66	39	12	1	2	1	2					4	132	27
66	40	8	I	2	1	2					4	78	24
66	41	8	I	2			1	τ			3	43	14
66	42	8	ı	2	1	2					4	29	3
"	43	§10										107	14
66	44	12	I	2	ı	2					4	132	27
"	45	8	1	2	ı	2					4	6	1
"	46	8	I	2	ı	2					4	9	ı
66	47	12	ı	2	ı	2			ı	2	6	49	7
- "	48	12	I	2	ı	2			I	2	6	19	9
66	49	10	1	2			1	1	1	2	5		
"	50	12	1	2	τ	2			ı	2	6	25	6
44	51	§10										74	12
"	52	12	ı	2	I	2			ı	2	6	8	6
"	53	12	I	2	I	2					4	134	25
"	54	12	ı	2			I	1			3	159	46
66	55	12	ı	2			I	1			3	<b>‡</b> 57	21
Hook a	and Ladder 1	12							ı	3	3	265	179
	2	12							I	2	2	267	101
	3	16					tı	2	ı	3	5	248	137
	4	12							1	2	2	234	132
	5	*18							2	4	4	191	91
	6	12							1	2	2	283	194
	7	12							1	2	2	184	114
	8	12							1	3	3	271	157
	" 9	*19							2	5	5	336	215
	" 10	12							1	3	3	190	129

<sup>\*</sup> Double companies. ‡ Training stable.

<sup>†</sup> Water tower in addition to other apparatus. § Floating engine.

		Men.		AF	PARA	TUS	AND	Hor	SES.		,,	ed to.	ty at.
(	COMPANY.				No. of Four- wheel Tenders.	No. of Horses.	No. of Two- wheel Tenders.	No. of Horses.	No. of Hook and Ladder Trucks.	No. of Horses.	Total No. of Horses.	No. of Alarms Responded to.	No. of Fires Performed Duty at.
Hook and	Ladder 11	12							ı	3	3	174	100
66	12	12							1	3	3	225	101
4.6	13	13							1	2	2	160	70
"	14	12							ı	2	2	135	92
66	15	12					*1	2	I	2	4	122	82
66	16	12							1	3	3	146	67
66	17	10							ı	2	2	85	41
66	18	12							1	3	3	†242	135
"	19	8					I	1	ı	2	3	13	11
	Total	934	62	124	31	61	34	36	28	65	286		

Average number of alarms responded to, 153. Average number of fires performed duty at, 58.

† Eleven months.

During the year three companies were organized, to wit:

Engine Company No. 55, on June 4, located at No. 173 Elm street.

Hook and Ladder Company No. 16, on January 13, located in the new Headquarters building, No. 159 East Sixty-seventh street.

Hook and Ladder Company No. 18, on February 1, located at No. 84 Attorney street.

The above companies are organized into twelve battalions, each consisting of from five to nine companies, commanded by a Chief of Battalion; the Assistant Chief of Department commands the First, Second, Third, Fourth, Fifth and Sixth Battalions, and the Second Assistant Chief of Department commands the Seventh, Eighth, Ninth, Tenth, Eleventh and Twelfth Battalions; the entire force is under the command of the Chief of Department.

<sup>\*</sup> Supply wagon.

## Register of Officers of the Uniformed Force on December 31.

27		ORIGINAL APPOI	INTMENT.	Promotio	N.
Name.	Age.	Grade.	Date.	Grades.	Dates.
Chief of Department. Shay, Charles O	30	Foreman	Sept. 25, 1865	District Engineer Assistant Chief of Department Chief of Department	May 19, 1873
Assistant Chief of Department. Bonner, Hugh	27	Foreman	Sept. 18, 1865	Chief of Battalion  2d Assistant Chief of Department  Assistant Chief of Department	Jan. 4, 1883
Second Assistant Chief of Department. McCabe, John	26	a Fireman	Sept. 26, 1866  July 1, 1873	Assistant Foreman. Foreman. Chief of Battalion. b 2d Assistant Chief of Department	Dec. 1, 1873 July 1, 1874 May 16, 1881
Chirfs of Battalion.  1. Gicquel, Benj. A	24	Fireman		Assistant Foreman. ForemanDistrict Engineer Chief of Battalion	May 1, 1884 Jan. 22, 1866 June 1, 1866 July 1, 1871 May 21, 1873
<ol> <li>Rowe, William</li> <li>Fisher, John S</li> </ol>	34	Fireman	Oct. 20, 1865 Jan. 9, 1868	Chief of Battalion  { Assistant Foreman Foreman Chief of Battalion	May 21, 1873 June 1, 1868 July 15, 1869 May 21, 1873
4. Campbell, Samuel.	25	Fireman	Oct. 16, 1865	Assistant Foreman. Foreman	Aug. 1, 1869 Feb. 1, 1873 Sept. 23, 1875
5. Reilly, Francis J.	2?	Fireman	Sept. 27, 1865	(Assistant Foreman.  c Foreman.  Assistant Foreman.  Chief of Battalion.  d 2d Assistant Chief  of Department	Oct. 15, 1870 July 1, 1871 May 1, 1872 June 6, 1872 Feb. 1, 1880 Aug. 4, 1880
6. Bresnan, John J	22	Fireman	Oct. 20, 1865	Assistant Engineer of Steamer Assistant Foreman. Foreman Chief of Battalion	Mar. 16, 1871 July 1, 1871 Mar. 1, 1873 Feb. 1, 1886
7. Reeves, Michael F.	27	Fireman	Apr. 16, 1867	Assistant Foreman. Foreman Chief of Battalion	Oct. 15, 1870 Aug. 1, 1871 Nov. 1, 1881
8. Gooderson, Thos	22	Fireman	Feb. 1, 1874	Assistant Foreman. Foreman Chief of Battalion	Dec. 21, 1874 Apr. 10, 1875 Jan. 15, 1883
9. Lally, Thomas	22	Fireman	Aug. 15, 1870	Assistant Foreman. Foreman Chief of Battalion	Apr. 21, 1873 Nov. 1, 1881 May 1, 1884
10. Purroy, Charles D.	24	Private	Jan. 22, 1880	Fireman Assistant Foreman. Foreman Chief of Battalion	Apr. 5, 1881 Dec. 31, 1882

 $<sup>\</sup>alpha$ Resigned, November 12, 1867.  $\delta$  Dismissed, July 21, 1886, and reinstated by court, July 1, 1887.  $\varepsilon$  Reduced to Fireman, April 1, 1872. d Reassigned as Chief of Battalion, July 1, 1887.

.,		ORIGINAL APPOI	NTMENT.	Ркомотю	N.
NAME.	Age.	Grade.	Date.	Grades.	Dates.
11. McGill, Joseph F	23	Fireman	Mar. 21, 1866	Assistant Foreman. Foreman Chief of Battalion	Apr. 1, 1870 Oct. 1, 1872 Aug. 12, 1884
12. Cashman, John J	22	Fireman	Oct. 17, 1866	Assistant Foreman. Foreman Chief of Battalion	Feb. 15, 1872 Apr. 27, 1879 Aug. 4, 1880
1. Poynton, Joseph	26	Foreman	Sept. 8, 1865	******	
2. Spence, Arnot	31	Foreman	Oct. 20, 1865		
3. McNeill, Alex	29	Assistant Foreman	Oct. 16, 1865	Foreman	June 1, 1868
4. Williams, Robert	40	Fireman	Dec. 1, 1865	Assistant Foreman.	June 1, 1868 Dec. 15, 1868
5. Donohue, Patrick.	26	Fireman	Sept. 27, 1865	{Assistant Foreman. Foreman	June 1, 1868 Feb. 1, 1869
6. Best, Samuel	32	Fireman	June 14, 1866	Assistant Foreman.	Apr. 17, 1867 Mar. 1, 1869
7. Shaw, William	27	Assistant Foreman	Oct. 2, 1865	Foreman	May 1, 1869
8. McCormick, Jas. A.	27	Fireman	Oct. 6, 1865	Assistant Foreman.	June 23, 1868 June 15, 1869
9. Castles, John	27	Fireman	Ju!y 27, 1866	{Assistant Foreman. Foreman	Apr. 1, 1869 July 15, 1869
10. Kehoe, John H	23	Fireman	Oct. 20, 1865	Assistant Foreman.	June 15, 1869 Dec. 1, 1869
11. McLaughlin, Wm.	29	Fireman	May 22, 1868	{ Assistant Foreman. Foreman	June 1, 1869 Mar. 1, 1870
12. Erb, George W	23	Fireman	Oct. 11, 1865	{Assistant Foreman. Foreman	Feb. 1, 1869 July 25, 1870
13. Hayes, William F.	27	{ Fireman	July 31, 1865 Apr. 1, 1886	{ Assistant Foreman. Foreman	Oct. 1, 1869 Oct. 15, 1870
14. Landers, Wm. H	41	Fireman	Sept. 29, 1865	{Assistant Foreman. Foreman	Nov.17, 1865 Dec. 24, 1870
15. Wolff, Charles A	33	Fireman	Mar. 21, 1866	{Assistant Foreman. Foreman	Aug. 1, 1870 July 1, 1871
16. Meagher, Daniel J.	23	Fireman	Oct. 6, 1865	{Assistant Foreman. Foreman	Dec. 24, 1870 Nov. 1, 1871
17. Vetter, Peter, Jr	26	Fireman	Oct. 27, 1865	{Assistant Foreman. Foreman	June 1, 1868 May 1, 1872
18. Cowie, John A	30	Assistant Foreman	Sept. 14, 1865	Foreman	Mar. 1, 1873
19. Jones, Henry M	27	Assistant Foreman	Sept 27, 1865	Foreman	Mar. 1, 1873
20. Ward, John	26	Fireman	Sept. 25, 1865	{Assistant Foreman. Foreman	Jan. 1, 1870 Mar. 1, 1873
21. Sattler, John	29	Fireman	Oct. 20, 1865	{Assistant Foreman. Foreman	July 1, 1871 Mar. 1, 1873

e Resigned, January 15, 1866.

		ORIGINAL APPOI	NTMENT.	Ркомотю	N.
NAME.	Age.	Grade.	Date.	Grades.	Dates.
22. Sheridan, Philip	23	Fireman	Oct. 20, 1865	{Assistant Foreman. Foreman	July 1, 1872 June 16, 187
23. Connor, David	25	Fireman	July 31, 1865	{ Assistant Foreman. Foreman	Nov. 1, 187 June 16, 187
24. Welsh, John	23	Fireman	Oct. 11, 1865	Engineer of Steamer Assistant Foreman. Foreman	
25. Chambers, Charles	31	{Engineer of} Steamer}	Sept. 14, 1865	{Assistant Foreman. Foreman	July 1, 187 Dec. 1, 187
26. Perley, Hamilton F	21	{Ass't Engineer} of Steamer}	Mar. 15, 1873	Assistant Foreman. Foreman	Jan. 15, 187. Aug. 1, 187.
27. Judge, Thomas	32	Fireman	June 28, 1866	{Assistant Foreman. Foreman	Oct. 18, 187 Dec. 21, 187
28. Monroe, James H.	29	Fireman	Oct. 16, 1865	Foreman	Apr. 17, 186 July 1, 187 May 21, 187 Feb. 15, 187
29. Van Horn, Thos. J.	26	Fireman	May 6, 1871	{ Assistant Foreman. Foreman	Jan. 15, 187 Mar. 1, 187
30. Hamblett, Roger B	21	Fireman	Sept. 11, 1865	Assistant Foreman.	June 1, 186 Mar. 1, 187
31. Kittson, Hugh	28	Fireman	Sept. 25, 1865	{Assistant Foreman. Foreman	July 1, 187 Mar. 1, 187
32. Eagan, John J	25	Fireman	Sept. 11, 1865	{Assistant Foreman. Foreman	Oct. 15, 187 Aug. 20, 187
33. Fisher, Isaac	22	Steamer of Steamer of Ass't Engineer of Steamer	Oct. 1, 1869 Nov. 1, 1872	Engineer of Steamer Assistant Foreman.	July 1, 187 Apr. 15. 187 Dec. 2, 187
34. Wray, Robert	23	Fireman	Oct. 16, 1865	Assistant Engineer of Steamer	June 1, 187 Sept. 1, 187 Mar.12, 187
35. Bradley, Daniel	30	Fireman	Mar. 1, 1866	{Assistant Foreman. Foreman	Mar. 1, 187 Apr. 3, 187
36. Bermingham, Wm.	34	Fireman	Dec. 15, 1873	{Assistant Foreman. Foreman	Oct. 1, 187 Dec. 8, 187
37. Farrell, Robert R.	26	hAss't Engin'r of Steamer. Ass't Engineer	Nov. 1, 1871 Mar. 15, 1873	{ Assistant Foreman . Foreman	Jan. 15, 187
38. Fleming, Wm. H	22	fireman	Oct. 17, 1870	Assistant Foreman. Foreman.	
39. Shay, Charles H	21	Private	Nov. 21, 1877	Fireman	Apr. 1, 187 Apr. 1, 187 Apr. 4, 187

f Reduced to Foreman, Feb. 15, 1875. g Resigned, May 21, 1872. h Resigned, May 21, 1872.

		ORIGINAL APPOIN	TMENT.	Риомотю	۷
Name.	Age.	Grade.	Date.	Grades.	Dates.
40. Perley, Charles H.	22	Private	Jan. 17, 1879	{Assistant Foreman. Foreman	Feb. 1, 1879 Aug.25, 1886
41. O'Brien, Edward	25	Fireman	July 1, 1869	Assistant Foreman.	Mar. 1, 1873 Sept.17, 1886
42. Brown, William W.	23	Fireman	June 14, 1866	{Assistant Foreman. Foreman	Dec. 1, 1873 Apr. 1, 1881
43. Byrne, Joseph P	28	Fireman	Oct. 1, 1871	Assistant Foreman.	May 1, 1875 July 1, 1881
44. Dwyer, John	27	Fireman	Oct. 16, 1873	{ Assistant Foreman. Foreman	
45. Duane, William	28	Fireman	Aug. 8, 1868	{ Assistant Foreman. Foreman	July 20, 1871 Nov. 1, 1881
46. Colby, Will am J	30	Fireman	July 7, 1875	{ Assistant Foreman. { Foreman	June 1, 1876 Nov. 1, 1881
47. Searle, George S	21	Fireman	Nov. 15, 1874	{ Assistant Foreman. { Foreman	July 22, 1880 Nov.18, 1881
48. Shaw, Joseph	28	{ i Engineer of Steamer }  Ass't Engineer of Steamer . }	Oct. 13, 1865 Feb. 1, 1874	Engineer of Steamer Assistant Foreman Foreman	Mar.15, 187. Aug. 8, 1878 Dec. 31, 188
49. Cusick, George	24	Fireman	Apr. 21, 1869	{Assistant Foreman. {Foreman	May 15, 187; Apr. 18, 188
50. Short, Peter H	26	Fireman	May 1, 1875	Assistant Foreman. Foreman	June 1, 1880 Apr. 18, 1889 Aug. 4, 1880
51. McAdams, H'y W.	23	Fireman	Sept. 18, 1874	{Assistant Foreman. Foreman	Nov. 1, 188 May 23, 188
52. Gleason, Luke	25	& Fireman	Jan. 1, 1869 Dec. 1, 1872	{ Assistant Foreman, Foreman	Apr. 8, 188 July 1, 188
53. Murray, Henry	24	{/Fireman	Oct. 13, 1865 Dec. 17, 1874	{ Assistant Foreman. Foreman.	Oct. 1, 1877 Jan. 15, 188
54. Gooderson, Fred- erick W., Jr	23	Private	Oct. 13, 1879	Assistant Engineer of Steamer Assistant Foreman. Foreman	Apr 1, 1886 May 23, 1885 May 3, 188
55. McCutchen, James	31	Fireman	Sept. 18, 1865	Assistant Foreman.	Mar. 1, 1866 May 20, 188
56. Hart, Michael	28	Fireman	Oct. 20, 1865	Assistant Foreman.	July 1, 187 May 20, 188
57. Connolly, Patrick J	28	Fireman	Jan. 15, 1873	{Assistant Foreman. {Foreman	Nov. 16, 188 May 20, 188
58. McCabe, Hugh D.	25	Private	Feb. 9, 1882	{Assistant Foreman. Foreman	
59. Shea, Joseph	29	Foreman	May 20, 1884		

i Resigned, October 16, 1871.
j Reassigned as Foreman, July 1, 1887.

k Resigned, June 1, 1872.
l Resigned, March 31, 1869.

		ORIGINAL APPOI	NTMENT.	Ркомотю	N.
Name.	Age.	Grade.	Date.	Grades.	Dates.
60. Cosgrove, James	21	Private	Jan. 1, 1878	Assistant Engineer of Steamer Assistant Foreman.	Mar. 21, 1880 July 1, 1881 June 6, 1884
61. Falvey, John	21	Fireman	Mar. 11, 1871 July 18, 1874	mAssistant Foreman { As istant Foreman. } Foreman	Feb. 15, 1872 Nov. 1, 1831 Aug. 1, 1884
62. McDonald, Alex	28	fireman	July 31, 1855 June 12, 1873	Assistant Foreman.	Jan. 7, 1876 Aug. 7, 1884
63. Scannell, Edw. A	24	Private	Apr. 7, 1881	{Assistant Foreman. Foreman	May 20, 1884 Aug.16, 1884
64. Binns, John	25	Private	Mar. 22, 1882	Assistant Foreman. Foreman	May 20, 1884 Aug. 16, 1884
65. Golden, John J	30	Fireman	Dec. 18, 1874	{ Assistant Foreman. Foreman	Feb. 1, 1883 Aug.22, 1884
66. Barry, James	23	Fireman	Jan. 20, 1874 Feb. 12, 1875	{ Assistant Foreman. { Foreman	May 20, 1884 Aug.22, 1884
67. Sullivan, Thomas	26	Dist. Engineer.	Sept. 6, 1865 Aug. 23, 1884		
68. Kenny, Thomas A.	29	Fireman	Aug. 4, 1876	{Assistant Foreman, Foreman	July 10, 1879 Feb. 1, 1885
69. Lawler, Daniel	24	Fireman	May 1, 1875	{Assistant Foreman. Foreman	Aug. 16, 1884 Feb. 1, 1885
70. Callaghan, Dnl. H.	26	Fireman	Mar. 1, 1873	{ Assistant Foreman. Fore nan	July 10, 1879 June 25, 1885
71. Cook, Martin	23	Hoseman	Jan. 1, 1870	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman Foreman Foreman	July 24, 1871 Jan. 13, 1874
72. Teal, Henry	21	Fireman	Aug. 1, 1871	{Assistant Foreman. Foreman	Sept.22, 1880 Nov. 15, 1885
73. Cooney, John J	29	Private, 3d Grade.	Sept. 1, 1882	Assistant Engineer of Steamer Assistant Foreman.	June 6, 1884 July 1, 1885
74. Ahearn, Thomas J.	23	Fireman	May 9, 1873	{Assistant Foreman. Foreman	Apr. 1, 1881 Feb. 25, 1886
75. White, John H	30	Fireman	Jan. 2, 1875	{Assistant Foreman. Foreman	Feb. 1, 1883 Feb. 25, 1886
76. Frazer, William D.	24	Fireman	July 3, 1872	{Assistant Foreman. Foreman	May 20, 1884 Dec. 1, 1886
77. Croker, Edward F.	21	Private	June 22, 1884	{Assistant Foreman. Foreman	Aug. 16, 1884 Feb. 25, 1886
78. McNamara, Mich.J	25	Fireman	Apr. 21, 1873	Assistant Foreman.	Aug. 27, 1884

m Dismissed, June 19, 1874.

p Dropped, May 21, 1873.

n Resigned, June 8, 1872. ο Resigned, July 1, 1875.
q Reduced to Assistant Foreman, Dec. 2, 1875.

Norm		ORIGINAL APPOI	NTMENT.	Promotio	N
NAME.	Age.	Grade.	Date.	Grades.	Dates.
79. Nugent, James M.	24	Private	Jan. 4, 1884	Assistant Foreman.	July 1, 1885 Jan. 15, 1887
80. O'Hearn, Thomas.	29	Fireman	June 12, 1875	{Assistant Foreman. Foreman	July 1, 1883 Feb. 1, 1887
81. Siegmann, Louis L.	24	Fireman	Feb. 8, 1871	{ Assistant Foreman. Foreman	Jan. 15, 1874 Mar. 1, 1887
82. McAvoy, Michael.	25	Fireman	Dec. 1, 1865	{Assistant Foreman. Foreman	Dec. 31, 1882 May 6, 1887
Assistant Foremen.					
1. Schuck, Henry	33	Fireman	Sept. 18, 1865	Assistant Foreman.	Nov. 22, 1865
2. Smith, Edward S	23	Fireman	Sept. 11, 1865	Assistant Foreman.	Dec. 15, 1868
3. Hicks, Matthew	21	Fireman	Aug. 10, 1868	Assistant Foreman.	Oct. 15, 1870
4. Riordan, John	21	Fireman	Sept. 20, 1866	Assistant Foreman.	Nov. 1, 1871
5. Lynar, Andrew	28	Fireman	Jan. 21, 1868	Assistant Foreman.	Feb. 15, 1872
6. Brennan, Ter'ce P.	25	Fireman	Oct. 6, 1865	Assistant Foreman.	July 1, 1872
7. McNamee, Charles	28	Fireman	July 1, 1869	Assistant Foreman.	Mar. 1, 1873
8. Jones, Walter H	25	Fireman	Oct. 21, 1870	Assistant Foreman.	Mar. 1, 1873
9. Conaghan, Patrick	23	Fireman	Oct. 20, 1865	Assistant Foreman.	Apr. 21, 1873
10. Braisted, Wm. C	25	Fireman	July 3, 1872	Assistant Foreman.	June 16, 1873
11. Campbell, James A	27	Fireman	Sept. 29, 1865	Assistant Foreman.	Aug.15, 1873
12. Moore, Edward S.	31	Fireman	Oct. 16, 1865	{ r Assistant Foreman Assistant Foreman.	Dec. 1, 1865 Nov. 3, 1873
13. Louis, Albert F	24	Fireman	Sept. 14, 1865	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman.	Apr. 1, 1871 Sept.11, 1872 Jan. 15, 1874
14. Burnett, Henry	33	Fireman	Sept. 22, 1865	Assistant Foreman.	Jan. 15, 1874
15. Cartright, Stephen	27	Fireman	Aug. 1, 1871	Assistant Foreman.	May 15, 1874
16. Flock, William F	27	Ass't Foreman	Sept. 8, 1865	s Foreman	Oct. 15, 1870
17. Neubauer, Michael	24	Fireman	Oct. 1, 1872	Assistant Foreman.	Oct. 19, 1874
18. Carey, Francis	25	Fireman	June 2, 1868	Assistant Foreman.	Dec. 21, 1874
19. Wright, Aug. H	29	Fireman	May 4, 1875	Assistant Foreman.	May 1, 1876
20. Kruger, Chas. W., Jr	22	{Ass't Engineer} of Steamer}	July 3, 1872	Assistant Foreman.	Sept.27, 1877
21. Kenehan, Rich'd F.	30	Fireman	July 1, 1875	Assistant Foreman.	Apr. 3, 1878
22. Finn, John	29	Fireman	Sept. 20, 1866	Assistant Foreman.	Aug.21, 1878
23. McCarthy, Patrick	25	Fireman	June 15, 1872	Assistant Foreman.	Apr. 27, 1879
24. Pesoa, Oscar A	30	Fireman	Sept. 14, 1865	{ t Assistant Foreman   Assistant Foreman.	Jan. 7, 1876 June 21, 1879

r Reduced to ranks, May 9, 1866. s Reduced to Assistant Foreman, June 24, 1874. t Reduced to Fireman, March 1, 1877.

		ORIGINAL APPOI	NTMENT.	Ркомотю	N.
NAME.	Age.	Grade.	Date.	Grades.	Dates.
25. O'Rourke, Owen	25	uFireman	Sept. 22, 1865 Feb. 12, 1875	Assistant Foreman.	July 10, 1879
26. Browning, William	21	Fireman	Apr. 23, 1869 May 9, 1873	{v Assistant Engineer of Steamer} Engineer of Steamer Assistant Foreman.	June 1, 1871 Aug. 1, 1874 Feb. 1, 1880
27. O'Reilly, Pat'k H.	23	Fireman	Aug. 21, 1875	Assistant Foreman.	July 20, 1880
28. Kerrigan, Francis.	29	Fireman	May 1, 1875	Assistant Foreman.	Sept.16, 1880
29. Case, Wright, Jr	25	Fireman	May 1, 1875	Assistant Foreman.	Nov.12, 1881
30. McCarthy, John	29	Fireman	Sept. 15, 1871	Assistant Foreman.	June 9, 1881
31. Moss, Joseph	28	Fireman	Dec. 1, 1871	Assistant Foreman.	Nov. 1, 1881
32. Gerity, James J	24	Fireman	Feb. 1, 1874	Assistant Foreman.	Nov. 1, 1881
33. Kelly, Thomas	28	w Fireman	Sept. 18, 1865 June 15, 1867	Assistant Foreman.	Nov. 25, 1881
3;. Hyde, David	27	Fireman	July 17, 1873	Assistant Foreman.	Mar.22, 1882
35. Farley, Thomas	25	x Fireman	May 13, 1868 Sept. 1, 1869	Assistant Foremant.	Apr. 10, 1812
36. Murphy, John	24	Fireman	Oct. 17, 1870	Assistant Foreman.	Aug. 7, 1882
37. Aiken, Alex. D	24	Fireman	July 19, 1871	Assistant Foreman.	Dec. 1, 1882
38. Barber, John	26	Fireman	Nov. 3, 1870	Assistant Foreman.	Feb. 1, 1883
39. Daniels, Clement L	25	Fireman	Oct. 11, 1873	Assistant Foreman.	Mar. 4, 1883
40. Ryan, Ed. F	22	Fireman	July 3, 1872	Assistant Foreman.	Mar. 6, 1883
41. Murphy, Lawrence	24	Fireman	June 12, 1871	Assistant Foreman.	May 17, 1883
42. Kennedy, Math. T.	28	Private	Dec. 21, 1877	Assistant Engineer of Steamer Assistant Foreman.	Nov.21, 1878 May 23, 1883
43. Margison, Charles.	27	Private	Jan. 22, 1877	Assistant Engineer of Steamer Assistant Foreman.	May 1, 1879 May 23, 1883
44. Jones, William H	29	Ladderman	Sept. 25, 1875	{Private	Apr. 1, 1878 May 23, 1883
45. Needham, John T	27	Private	Jan. 1, 1881	Assistant Foreman.	May 23, 1883
46. Murphy, John McL	23	Private	Nov. 21, 1881	Assistant Foreman.	May 23, 1883
47. Hopper, Charles	25	y Fireman	Mar. 2, 1870 Feb. 12, 1876	Assistant Foreman.	Aug. 1, 1883
48. Meehan, Edward	24	Fireman	July 23, 1870	Assistant Foreman.	Aug. 13, 1883
49. Beekler, Jacob	24	Fireman	Mar. 15, 1871	Assistant Foreman.	Nov. 1, 1883
50. Autenreith, Chas.J.	25	Private	Feb. 12, 1881	Assistant Engineer of Steamer Assistant Foreman.	Dec. 17, 1881 May 20, 1884

u Discharged while detailed as Carpenter, Jan. 1, 1875. v Resigned, September 16, 1872. w Resigned, September 29, 1865. x Dismissed, August 10, 1869. y Resigned, August 1, 1871.

27		ORIGINAL APPOI	NTMENT.	Promotion	٧.
NAME.	Age.	Grade.	Date.	Grades.	Dates.
51. Hearn, John	24	Fireman	Sept. 11, 1865	Assistant Foreman.	May 20, 1884
52. Head, Thomas	26	Fireman	Feb. 15, 1869	Assistant Foreman.	May 20, 1884
53. Touhey, Martin J	23	Fireman	Mar. 15, 1872	Assistant Foreman.	May 20, 1884
54. Donohue, Malachi.	24	Fireman	June 10 1870 Dec. 1, 1873	z Assistant Foreman Assistant Foreman.	Oct. 17, 1872 May 20, 1884
55. Gaffney, Andrew	27	Fireman	Dec. 1, 1873	Assistant Foreman.	May 20, 1884
56. Reed, Samuel	25	Fireman	Sept. 1, 1875	Assistant Foreman.	May 20, 1884
57. Quirk, William	27	Private	May 19, 1881	Assistant Foreman.	May 20, 1884
58, Hennessey, Wm	30	aa Fireman Private	Dec. 21, 1874 Jan. 18, 1882	Assistant Foreman.	May 20, 1884
59. Leonard, John H.	32	Private	Feb. 1, 1877	Fireman	Apr. 13, 1877 Apr. 20, 1877 Oct. 4, 1878 Aug. 16, 1884
60. O'Grady, Joseph	27	Private	Nov. 24, 1877	Assistant Engineer of Steamer Assistant Foreman.	Oct. 20, 1880 Aug.16, 1884
61. Reilly, Bernard J	27	Fireman	May 1, 1875	Assistant Foreman.	Aug. 21, 1884
62. Reilly, Michael A.	22	Private	Apr. 4, 1881	Assistant Foreman.	Aug.21, 1884
63. Kinsella, Henry	27	Private	Feb. 3, 1883	Assistant Foreman.	Aug. 27, 1884
64. McNamara, John J.	25	Fireman	Dec. 7, 1877	Assistant Engineer of Steamer Assistant Foreman.	Apr. 11, 1880 July 1, 1885
65. Petersen, Adolph J.	25	Fireman	Oct. 25, 1873	Assistant Foreman.	July 1, 1885
66. Tobin, Edward H.	22	Fireman	May 4, 1875	Assistant Foreman.	July 1, 1885
67. Beshinger, Joseph.	23	Private	May 10, 1880	Assistant Foreman.	July , 1885.
68. Banta, Samuel	28	Private	Jan. 22, 1883	Assistant Foreman.	July 1, 1885
69. Gormley, Patrick.	28	Private	May 15, 1884	Assistant Foreman.	July 1, 1885
70. Ryan, Patrick F	23	\begin{cases} bb Engineer of \ Steamer \cdots \\ Ass't Engineer \ of Steamer \cdots \end{cases}	Nov. 1, 1871 Sept. 6, 1874	Engineer of Steamer Assistant Foreman.	July 21, 1875 Nov.15, 1885
71. Delaney, James	23	Fireman	Aug. 1, 1869	Assistant Engineer cf Steamer Engineer of Steamer Assistant Foreman.	Mar. 16, 1871
72. Honan, John S	25	Private	May 8, 1883	Assistant Foreman.	Nov.15, 1885
73. McAllister, Bern'd	31	Private	Dec. 3, 1877	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman.	June 1, 1880
74. Shute, James H	23	Fireman	Oct. 17, 1873	Assistant Foreman.	Feb. 1, 1886

z Dismissed, November 23, 1873. aa Dismissed, October 19, 1876. bb Resigned, November 3, 1873.

N		ORIGINAL APPOIN	NTMENT.	Ркомотю	٧.
Name.	Age.	Grade.	Date.	Grades.	Dates.
75. Burns, John J	21	Private	Aug. 17, 1883	Assistant Foreman.	Feb. 1, 1886
76. Martin, Michael	26	Fireman	July 1, 1873	Assistant Foreman.	Dec. 1, 1886
77. Miller, William	28	Private	Apr. 2, 1881	Assistant Foreman.	Dec. 1, 1886
78. Flaherty, James	29	Private	Feb. 15, 1882	Assistant Foreman.	Dec. 1, 1886
79. Whelan, John T	29	Fireman	May 20, 1884	Assistant Foreman.	Dec. 1, 1886
80. Taylor, Joseph W.	25	Fireman	Jan. 1, 1873	Assistant Foreman.	Mar. 1, 1887
81. Nash, William H	21	Fireman	Sept. 9, 1876	Assistant Engineer. Engineer Assistant Foreman.	Jan. 1, 1886
82. Burke, Coleman J.	22	Private	Jan. 1, 1878	Assistant Engineer. Engineer Assistant Foreman.	Jan. 1, 1886
83. Norris, Richard J.	25	Private	July 15, 1879	Assistant Foreman	Feb. 1, 1887
84. Reilly, Michael F.	29	Private	Jan. 13, 1880	Assistant Foreman.	Feb. 1, 1887
85. Farrell, George F.	-25	Private	Nov. 1, 1880	Assistant Foreman.	Feb. 1, 1887
86. Reilly, Henry P	21	Private	Oct. 21, 1881	Assistant Foreman.	Dec.27, 1887
87. McCartney, Jas. J.	28	Fireman	Aug. 1, 1884	Assistant Foreman.	Dec.27, 1887

Year of Entry into the Uniformed Force of Officers and Members in Active Service on December 31.

APPOINTED IN-	Officers.	Engineers.	FIREMEN.	TOTAL.
1865	53	9	38	100
1866	12	5	16	33
1867	I	2	2	9
1868	7	6	8	21
1869	9	6	18	33
1870	6	2	14	22
1871	14	2	10	26
1872	6	4	22	32
1873	15	7	47	6
1874	7	9	38	54
1875	14	8	22	4
1876	2		8	10
1877	7	11	4	2:
1878	2	I	2	
1879	3	6	7	10
1880	4	II	26	4
1881	8	5	34	4
1882	4	3	50	5
1883	4	8	73	8
1884	6	9	81	9
1885		5	33	3
1886		4	54	5
1887		2	44	4
	184	125	651	96

Number and Character of Alarms, Manner of Receipt and Cause.

1 1	.fetoT	86	133	626'2	3,160
	Fire.	:	:	2,929 2	2,929 3
	ariH	_		2,5	2,5
	Smoke, etc., issuing from Premises.	:	119	:	6rı
	Reflection of Distant Fire.	:	н	:	н
	Reflection from Stoves,	:	13	:	13
	Not ascertained.	91	:	:	91
Ä,	Malicious Mischief.	II	:	:	11
CAUSE	Івпотапсе.	7	:	:	7
	Heat and Disarrangement of Automatic Telegraph.	39	:	:	33
	Fire outside of City.	3	:	:	3
	Explosions.	4	:	:	4
	Exhibition of Depart- ment.	63	:	:	0
	Еггог.	7	:	:	7
	Cry of " Fire."	I	:	:	н
	Accidents.	00	:	:	80
	Total.	86	133	2,929	3,160
SCEIPT	Automatic Telegraph.	45	н	9I	62
MANNER OF RECEIPT.	Verbally.	6	40	1,333	1,382
MANNE	Special Department Tele- graph Signals.	3	81	21	92
	From Department Street Alarm-boxes.	41	8	1,559	069,1
	ALARMS.	Unnecessary	Indication of fire	Fires	Total

for fires.	2.9	33	,,	93	"
oved to be	2.9	"	3	"	,,
1 261 pro	1,002	513	205	948	2,929
of which	9,9	3.9	,,,	:	;
269 alarms were communicated by attachés of this Department, of which 261 proved to be for fires.	" Police	District key-holders,	Citizen "	all other means,	all the various means,
nunicated by attac	***	" Dist	" Citiz	" all or	" all th
were comn	**	,,	,,	**	,,
269 alarms	, 150'1		, 526		3, 160
	H			H	C

26

# Statistics of Fires.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year,
In buildings—							1 3						
Confined to point of )	226	190	223	229	214	193	348	180	181	195	217	253	2,649
starting	28	17	22	20	13	8	11	8	4	9	13	22	175
Extended to other buildings		3	I	3	8	3	5		3	4	4	3	37
oundings,										_			
Number in buildings.	254	210	246	252	235	204	364	831	188	208	234	278	2,861
In vessels		1	2	3		I	2	2		I	3	1	16
In other places (woods, etc.)	1		3	3	4	4	6	5	9	8	7	2	52
Tr1										_			
Total	255	211	251	258	239	209	372	195	197	217	244	281	2,929
Discovered by -													
Attachés of Fire Department	20	19	23	22	19	18	57	9	14	16	23	21	26 <b>1</b>
Attaches of Police Department	88	85	97	90	86	72	100	65	70	70	79	100	1,002
District key-holders	46	36	41	53	36	34	68	28	29	44	50	48	513
Citizen key-holders	23	15	25	16	16	17	18	12	12	17	14	20	205
All other means	78	56	65	77	82	68	129	81	72	70	78	92	948
m . 1			-										
Total	255	211	251	258	239	209	372	195	197	217	214	281	2,929
Extinguished —													
Without engine stream	166	131	149	160	153	150	294	142	138	150	155	184	1,972
With one engine stream	45	56	61	57	49	31	49	39	34	44	50	57	572
With two or three engine streams	28	17	29	27	25	20	19	12	21	16	31	32	277
With more than three engine	16	7	12	14	12	8	10	2	4	7	8	8	то8
streams)	_		-	_	_					<b></b> -	_		
Total	255	211	251	258	239	209	372	195	197	217	244	281	2,929
Extent of damage to build- ings and vessels—		=				===		==				=	==
Built mainly of brick, stone or iron:													
Slight	75	69	73	67	73	43	55	55	46	43	58	74	731
Considerable	13	4	7	11	10	6	5	ı	4	6	6	5	78
Destroyed					13		1						14
Total	00						6-						800
Total	88	73	80	78	96	49	61	56	50	49	64	79	823

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Extent of damage to build- ings and vessels— Built mainly of wood:													
Slight	3	9	13	8	18	14	8	2	8	7	11	21	122
Considerable	3	1	4	2	2	2	2	2	I	2	1	1	23
Destroyed		1			9		I			••			11
Total	6	11	17	10	29	16	11	4	9	9	12	22	156
Total buildings and ves- sels damaged	94	84	97	88	125	65	72	60	59	58	76	101	979
To which the damage was—													
Slight	78	78	86	75	91	57	63	57	54	50	69	95	853
Considerable	16	5	11	13	12	8	7	3	5	8	7	6	101
Destroyed		1			22		2					,	25
Number of fires resulting in damage to contents only; buildings or vessels not damaged	29	15	30	41	43	35	99	31	26	34	28	43	454
Number of fires resulting in nominal damage (less than \$10) to beither structures or contents	94	60	68	95	89	88	137	80	79	90	78	104	1,062

Attention is invited to the following comparative statistics:

Percentage of—

1881-1886 (6 years).

1887.

Fires in buildings

extending to other

buildings ...... 2 1/4 per cent. I 1/4 per cent.
Buildings destroyed. Nearly 2 per cent. Less than I per cent.

Number of Fires occurring each Day of the Week and during the Different Hours and Periods of the Day, by Months.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Monday	51	32	21	37	34	30	*	32	26	42	36	43	528
Tuesday	42	28	36	41	36	29	39	33	26	18	45	46	419
Wednesday	32	21	36	31	41	29	25	28	27	36	50	31	387
Thursday	25	32	57	30	34	39	33	20	34	21	32	52	409
Friday	27	31	31	40	17	16	42	32	28	31	25	40	360
Saturday	33	44	39	43	40	37	48	23	25	35	29	43	439
Sunday	45	23	31	36	37	29	41	27	31	34	27	26	387
Between the hours of—		_	=		=	=	=				=	=	
12 midnight and 1 a. m	14	7	14	3	10	4	10	6	8	6	8	8	98
1 a. m. and 2 a. m	7	9	9	10	8	5	2	10	11	4	7	6	88
2 a. m. and 3 a. m	2	4	11	4	6	3	9	3	11	7	4	5	69
12 midnight and 3 a. m	23	20	34	17	24	12	21	19	30	17	19	19	255
3 a. m. and 4 a. m	5	2	4	13	-4	6	3	6	3	3	7	4	60
4 a. m. and 5 a. m	2	7	4	5	2	4	8	1	3	4	1	3	44
5 a. m. and 6 a. m	6	2	5	1	4	6	6	2	3	5	5	8	53
3 a. m. and 6 a. m	13	11	13	19	10	16	17	9	9	12	13	15	157
12 midnight and 6 a. m	36	31	47	36	34	28	38	28	39	29	32	34	412
6 a. m. and 7 a. m	ı	4	4	6	4	3	5	2	4	2	10	9	54
7 a. m. and 8 a. m	4	10	8	5	4	3	3	1	3	4	3	5	53
8 a. m. and 9 a. m	6	9	11	4	11	6	8	6	5	3	7	6	82
6 a. m. and 9 a. m	11	23	23	15	19	12	16	9	12	9	20	20	189
9 a. m. and 10 a. m	9	8	4	13	9	5	17	3	5	10	6	8	97
10 a. m. and 11 a. m	9	6	3	17	6	7	13	10	8	7	12	15	113
11 a. m. and 12 m	13	11	8	16	10	7	13	12	8	6	21	10	135
9 a. m. and 12 m	31	25	15	46	25	19	43	25	21	23	39	33	345
6 1	42	48	38	61	44	31	59	34	33	32	59	53	534
6 a. m. and 12 m	1												

<sup>\*</sup>July 4 occurred on Monday.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Between the hours of—													
12 m. and 1 p. m	7	8	10	5	4	8	23	5	5	4	14	10	103
1 p. m. and 2 p. m	11	9	11	7	6	10	20	14	9	11	10	6	124
2 p. m. and 3 p. m	13	10	10	13	12	10	16	5	8	15	11	16	139
12 m. and 3 p. m	31	27	31	25	22	28	59	24	22	30	35	32	366
3 p. m. and 4 p. m	8	4	11	8	12	12	22	10	8	5	11	10	121
4 p. m. and 5 p. m	13	7	11	14	8	18	15	7	8	14	20	11	146
5 p. m. and 6 p. m	23	τ6	12	16	10	8	22	10	7	12	18	25	179
3 p. m. and 6 p. m	44	27	34	38	30	38	59	27	23	31	49	46	446
12 m. and 6 p. m	75	54	65	63	52	66	118	51	45	61	84	78	812
6 p. m. and 7 p. m	24	11	24	17	11	16	21	12	8	28	16	19	207
7 p. m. and 8 p. m	16	22	19	24	27	12	26	18	23	19	14	25	245
8 p. m. and 9 p. m	20	15	17	17	26	24	33	20	20	8	12	23	235
6 p. m. and 9 p. m	60	48	60	58	64	52	80	50	51	55	42	67	687
9 p. m. and 10 p. m	23	14	16	18	15	12	37	12	6	15	13	21	202
10 p. m. and 11 p. m	11	10	17	14	15	13	22	13	11	15	8	12	161
11 p. m. and 12 midnight	8	6	8	8	15	7	18	7	12	10	6	16	121
9 p. m. and 12 midnight	42	30	41	40	45	32	77	32	29	40	27	49	484
6 p. m. and 12 midnight	102	78	101	98	109	84	157	82	80	95	69	116	1,171
12 m. and 12 midnight	177	132	166	161	161	150	275	133	125	156	157	194	1,983
6 a. m. and 6 p. m	117	102	103	124	96	97	177	85	78	93	143	131	1,346
6 p. m. and 6 a. m	138	109	148	134	143	112	195	110	119	124	101	150	1,583
Total each month	255	211	251	258	239	209	372	195	197	217	244	281	2,929

#### Notable Fires.

January 20—Nos. 175 and 177 Canal street, a five-story brick building, 50 by 100 feet, occupied by a furniture company as a sale and storage house. The fire originated on the third floor and extended to the roof, considerably damaging the building. The first alarm was received at 2.45 A. M., and at 2.48 and 3.06 A. M., respectively, second and third alarms were sent out. The services of twelve engine and four hook and ladder companies and a water-tower were required, and the fire was under control in two hours. The cause was supposed carelessness in the use of matches, and the loss is estimated at \$34,020.

January 22-Nos. 72 and 74 West Twenty-third street, a six-story brick building, 75 by 100 feet, occupied by dealers in dry goods. The fire originated on the first floor and extended through the stairway to the second floor, slightly damaging the building. The first alarm was received at 9.14 P. M., and as Hook and Ladder Company No. 3 was the only company in quarters to respond thereto (the other companies due at the station being at the time on duty at a fire at No. 257 West Twenty-seventh street), the telegraph operator immediately sent out a special call (as the rules provide) for the second section of Engine Company No. 16 to proceed to the fire. On his arrival the commanding officer of Hook and Ladder Company No. 3 sent out a third alarm at 9.21 P. M., and a simultaneous call (third alarm for the companies due at station 265 to proceed to station 377) at 9.23 P. M. The fire required the services of nine engine and five hook and ladder companies, and was under control in forty-five minutes. Its cause could not be ascertained, and the estimated loss was \$81,575.

January 24—No. 497 Broadway, extending through to No. 68 Mercer street, a four-story brick building, 25 by 200 feet, occupied by a furrier, and others. The fire originated

on the second floor and extended to third and fourth floors. The building was considerably damaged. The first alarm was received at 6.14 P. M., and at 6.24 and 6.26 P. M., respectively, second and third alarms were sent out. Six engine and four hook and ladder companies and a water-tower were used in extinguishing the fire, which was under control in thirty minutes. The cause of the fire was not ascertained, and the estimated amount of loss was \$40,250.

January 25—No. 57 Murray street, a five-story brick, marble front building, 25 by 75 feet, occupied by manufacturers of patent medicines. The fire originated on the second floor and extended by hatchway to the third, fourth and fifth floors, damaging the building considerably. The first alarm was received at 11.23 A. M., and at 11.30 A. M. a third alarm was sent out. The services of eleven engine and four hook and ladder companies and a water-tower were necessary in extinguishing the fire, which was under control in forty-five minutes. The fire was caused by hot ashes being placed in a wooden box, and the estimated amount of loss was \$26,045.

January 26—Nos. 142 and 144 Mulberry street, a six-story brick building, 50 by 100 feet, occupied as a paper-box manufactory and for other purposes. The fire originated on the second floor and extended to the sixth floor. The building was considerably damaged. The first alarm was received at 8.28 P. M., and at 8.37 and 8.48 P. M., respectively, second and third alarms were sent out, and also special calls for three engine companies. It required the services of fourteen engine and four hook and ladder companies and a water-tower to extinguish the fire, which was under control in three hours and fifteen minutes. The cause was not ascertained, and the loss was estimated at \$81,050.

January 29—Pier 9, North river, a two-story frame building, 40 by 400 feet, occupied by the Cromwell Steamship Line for storing merchandise. The fire originated among bales of cotton

(of which there were about 2,000) and it extended to all parts of the building and the dock, considerably damaging both. The first alarm was received at 4.23 P. M., and at 4.26 and 4.34 P. M., respectively, second and third alarms were sent out. The services of eleven engine and four hook and ladder companies and of both of the floating engines, were required to extinguish the fire, and it was under control in two hours. There was considerable delay in sending the first alarm for this fire, the police officer who sent it out claiming that he attempted to use box 21 (at corner of West and Rector streets) and finding it out of order, after waiting about three minutes sent the alarm from box 22 (Greenwich and Rector streets), to which the companies responded. The second alarm was, however, sent out from box 21 by an officer of this Department (three minutes after the first was received from box 22), at which time the box was found to be in working order. The cause was supposed to be spontaneous combustion, and the estimated loss was \$68,500.

February 20—Nos. 622 and 624 Broadway, extending through to Nos. 156 and 158 Crosby street, a six-story brick, iron front building, 50 by 200 feet, occupied by various firms in the manufacture of clothing. The fire originated on the fifth floor and extended by means of the recesses in the walls and through the ceiling to the sixth floor, the building being considerably damaged. The first alarm was received at 4.39 A. M., and at 4.58 and 5.28 A. M., respectively, second and third alarms were sent out. The fire required the services of eleven engine and five hook and ladder companies, and was under control in two hours. The cause could not be ascertained, and the loss was estimated at \$117,000.

February 28—Pier, new No. 37, North river. The fire originated on the lighter "Lorena," loaded with 1,050 bales of cotton, and extended to the following lighters: "Peter Ritter," loaded with 550 bales of cotton, the "Montague Morgan," loaded with 352 bales of cotton, and the "Hope," loaded with

455 bales of cotton, and to the canal-boat "G. W. Wood." loaded with cannel coal, all of which boats lay at the south side of the pier, and were considerably damaged. The fire also extended to the pier, on which was a one and three story frame building, 70 by 500 feet, occupied by the Morgan Steamship Line for the reception and storage of merchandise, etc., which was totally destroyed. It also extended to the steamship "Lone Star," lying on the south side of the pier, considerably damaging it, also to the lighter "Angeline Anderson," lying on the north side of pier, and loaded with 1.110 bales of cotton, which was slightly damaged. The first alarm was received at 6.27 A. M., and at 6.35 and 6.40 A. M., respectively, second and third alarms were sent out. The fire required the services of eleven engine and four hook and ladder companies and floating engine 43, and was under control in two hours. On the arrival of the first alarm companies, the tide was found to be extremely low, a strong gale of wind was blowing and the lighters "Lorena" and "Ritter." with their loads of cotton (all uncovered), lying near the outer end of the pier entirely in flames. The low tide allowed the flames to be driven under the pier and ignited it, and thence passed up through closets into a loft on the end of the pier used for rigging purposes, cooper's and carpenter's shops, and thence extended with such rapidity throughout the entire structure on the pier, that a part of the force, consisting of the Chief of Department, Chief of the Third Battalion, the officers and men of Engine Companies Nos. 24, 27, 30 and Hook and Ladder Company No. 5, together with several employees, were almost surrounded by the fire, but succeeded in making their way to one of the gangways on the north side of the pier to the string-piece, where they remained until taken off by the tugboat "D. M. Cox," which they hailed from mid stream. Chief of the Fifth Battalion, together with some of the members of Engine Companies Nos. 13, 24 and 30, and several employees of the Steamship Company, succeeded in reaching the West

street end of the pier, passing through dense smoke. Under direction of the Chief of Department, the members of the force who were taken off the pier on the tug-boat "D. M. Cox" rescued one of the employees, named Henry Wyatt (who had taken refuge in an office on the pier, and could not escape), by cutting away a wire screen from the office window and pulling him through and on to the boat. Fireman Edward D. Farrell, of Engine Company No. 24, was severely burned about the head, face and hands, while making his escape from the pier. Thirty-eight lengths of hose belonging to Engine Companies Nos. 13, 24 and 30, which had to be abandoned, were destroyed. The Department labored under great disadvantage on account of the floating Engine (51) being out of service undergoing repairs at the time. In connection with this circumstance attention is invited to the want of an additional fire-boat, to provide which the necessary appropriation was applied for in the departmental estimate for the current year, but for which purpose no appropriation was made by the Board of Estimate and Apportionment. The fire was caused by sparks igniting the cotton on the lighter "Lorena," and resulted in an estimated loss of \$492,600.

March 5—Nos. 27, 29 and 31 Rose street, a four and five story brick building, 75 by 80 feet. The fire originated in the cellar of No. 29, occupied as a manufactory of wheelbarrows, and extended by hatchways and openings in the floors throughout the entire building. No. 27 was occupied as a printing establishment, and No. 31 was occupied by a publishing company. The building was considerably damaged. The first alarm was received at 4.23 P. M., and at 4.32 and 4.45 P. M., respectively, second and third alarms were sent out. Eleven engine and four hook and ladder companies, and one water-tower were employed in extinguishing the fire, and it was under control in two and one-quarter hours. The fire was caused by the careless use of matches, and the loss is estimated at \$80,000.

March 8—Nos. 145 to 149 Bowery, a four and five story brick, free-stone front building, 75 by 75 feet, occupied as a tailoring establishment. The fire originated in the cellar and extended by dumb-waiter and stairways to all parts of the building, which was considerably damaged. The first alarm was received at 4.54 A. M., and at 4.57 and 4.58 A. M., respectively, second and third alarms were sent out, and also special calls for two engine companies. It required the services of thirteen engine and four hook and ladder companies to extinguish the fire and it was under control in one and one-half hours. It was caused by escaped gas igniting, and the estimated loss was \$60,200.

March 13—Nos. 297 to 303 Cherry street, a seven-story brick building, 100 by 200 feet, occupied as a chair manufactory. The fire originated on the seventh floor and extended to the roof. The building was slightly damaged. The first alarm was received at 2.06 P. M., and at 2.10 and 2.10½ P. M., respectively, second and third alarms were sent out, and a special call for a water-tower. Ten engine and four hook and ladder companies were required to extinguish the fire, which was under control in thirty minutes. The cause was spontaneous combustion, and the estimated loss \$33,000.

March 26—No. 471 Broadway, extending through to No. 44 Mercer street, a five-story brick building, 25 by 200 feet, occupied by dealers in fancy goods. The fire originated on the first floor and extended to the second. The building was slightly damaged. The first alarm was received at 9.23 P. M., and at 9.34 P. M. a second alarm was sent out. The services of three engine and three hook and ladder companies were required, and it was under control in thirty minutes. Carelessness with matches was the cause of the fire and the loss was estimated at \$47,000.

March 26—Nos. 483 and 485 Broadway, extending through to Mercer street, a five-story brick, iron front building, 50 by

200 feet, occupied by importers of fancy goods. The fire originated on the second floor and extended through light openings to the first, third and fourth floors. The building was slightly damaged. The fire was discovered by Assistant Foreman Ryan, of Engine Company No. 33, while the companies were at work at the fire No. 471 Broadway. The first alarm was sent out at 9.52 P. M., and at 9.56 P. M. a third alarm was sent out because the companies which responded on the second alarm to the fire at No. 471 Broadway were on their way back to quarters at the time this fire was discovered. The fire required the services of five engine and three hook and ladder companies to extinguish it, and it was under control in twenty-five minutes. The cause was defective insulation of electric-light wires, and the estimated loss amounted to \$94,500.

April 11—Nos. 202 and 204 Canal street, a six-story brick building, 50 by 100 feet, occupied as a furniture manufactory. The fire originated on the fifth floor, extended to the fourth and sixth floors by stairway, and considerably damaged the building. The first alarm was received at 6.53 P. M., and at 6.58 and 7 P. M., respectively, second and third alarms were sent out. The services of fourteen engine and four hook and ladder companies, and two water-towers were required, and the fire was under control in two hours. The cause was carelessness of occupant, gas-light igniting woodwork, and the loss amounted to \$40,100.

April 16—North river, from Sixty-seventh to Seventieth street. The pipe-line of the Standard Oil Company, extending on the bottom of the river from Weehawken, N. J., to and across this city, underground, and thence on the bottom of the East river to Hunter's Point, L. I., was broken and the escaping oil arising therefrom in large quantities became ignited, and was driven by the wind against the piers, bulkheads, structures and vessels of the New York shore. The entire surface of the river from the shore, more than one thousand feet out into

the stream and from Sixty-seventh to Seventy-second street, was at one time a mass of flame. It was, of course, impossible to extinguish the burning oil, but the further escape of the oil was stopped by shutting off the pipe on the New Jersey side, and its flow down the river was checked by the two floating engines. In the meantime, though every effort was made to prevent it, the fire communicated to the piers, bulkheads, structures and vessels, resulting in the following damage:

Destroyed—Piers at Sixty-seventh and Seventieth streets, with structures upon them and the barge "Pilgrim." Damaged—Coal car trestle-work, bulkheads, piers, etc. The first alarm was received at 10.19 A. M. and a third alarm was sent out at 10.27 A. M., calling for the services of eleven land engines, two floating engines and three hook and ladder companies. The fire was under control in two hours and fifteen minutes. The cause was crude petroleum on water ignited by coals from passing tug-boats. The loss was \$28,200.

April 28-Nos. 221 to 227 Canal street, a six-story brick building, 100 by 175 feet. The fire originated in the cellar of No. 221, which, together with the first and second floors, was used for the storage of upholstery supplies; the cellar and first floor of No. 223, the cellar and first floor of No. 227, for the storage of furniture; the third floor of Nos. 221 to 227 as a manufactory of umbrella coverings, and the fourth, fifth and sixth floors of Nos. 221 to 227 as a manufactory of dress and cloak trimmings. The most determined efforts were made by the Department, and for over one hour the fire was confined to the cellar, but it nevertheless extended to the upper part of the building through belt shafts in the rear, considerably damaging it. The services of fifteen engine and four hook and ladder companies and one water-tower were required, and the fire was under control in two hours and forty minutes. The first alarm was received at 6.42 P. M., and the third alarm was sent out at 6.44 P. M., after which special calls for six engine and one hook and ladder company were sent out. The cause was not ascertained, and the loss amounted to \$182,800.

May 7-One Hundred and Twenty-fourth and One Hundred and Twenty-fifth streets, between First and Pleasant avenues, and East river. The fire originated in a two-story stone building, 50 by 75 feet, occupied as a planing mill, and destroyed the building. It also extended to the one-story frame building, 30 by 80 feet, occupied as a sash and blind manufactory, which was considerably damaged; to the onestory frame building, 25 by 50 feet, on the south side of East One Hundred and Twenty-fifth street, occupied as a stair manufactory, which was destroyed; to the two-story frame building, 30 by 60 feet, on the north side of East One Hundred and Twenty-fourth street, occupied as a wood-turning establishment, which was destroyed; to Nos. 413 and 415 East One Hundred and Twenty-fourth street, a three-story brick building, 50 by 100 feet, occupied as a sash and blind manufactory, which was slightly damaged; and to a lumber yard, which was stored with a large amount of lumber. The first alarm was received at 10.40 P. M., and the third alarm was sent out at 10.42 P. M. The services of ten engine and three hook and ladder companies and one floating engine were required, and the fire was under control in three hours. The fire was caused by overheated steam-pipes in drying room, and the loss amounted to \$177,050.

May 14—Thirty-third and Thirty-fourth streets, between Eleventh and Twelfth avenues. The fire originated in bin No. 23 of the one-story frame building, 700 by 50 feet, on Thirty-third street, occupied by various hay dealers, and the building was destroyed. It extended to Nos. 389 to 395 Eleventh avenue, a two-story brick building, 100 by 100 feet, occupied as a feed mill, the building being considerably damaged; to Nos. 604 to 624 West Thirty-fourth street, a one-story frame and corrugated-iron building, 250 by 100 feet, occupied by various hay dealers, which was destroyed; to No. 626 West Thirty-

fourth street, a two-story brick building, 25 by 100 feet, occupied by a hay dealer, which was destroyed; to Nos. 628 and 630 West Thirty-fourth street, a three-story brick building, 50 by 100 feet, occupied by feed dealers, which was destroyed; to No. 632 West Thirty-fourth street, a three-story brick building, 25 by 60 feet, occupied as a liquor saloon and dwelling, which was destroyed; to Nos. 634 and 636 West Thirty-fourth street, a four-story brick building, 50 by 100 feet, occupied by a brewing company, which was destroyed: to No. 646 West Thirty-fourth street, a three-story brick building, 25 by 60 feet, occupied as a liquor saloon and dwelling, which was considerably damaged; to a freight car of the New York Central and Hudson River Railway Co., which was partially destroyed; and to the tower of the Manhattan Market on Thirty-fourth and Thirty-fifth streets, between Eleventh and Twelfth avenues, which was slightly damaged. The fire required the services of twelve engine and four hook and ladder companies, and one floating engine, and was under control in two hours. The first alarm was received at 7.24 1/2 P. M., and second and third alarms were sent out respectively at 7.29 and 7.29 1/2 P. M. The fire was caused by sparks from locomotive igniting hay, and the loss amounted to \$125,200.

May 27—Fifty-third and Fifty-fourth streets, Tenth and Eleventh avenues. The fire originated on the first floor of three-story brick building, 200 by 600 feet, occupied by the Belt Line Railroad Company as stables, and storage for cars, feed, etc., and extended to all parts of the building, which was destroyed. The investigation made showed that an employee of the company took the fire-alarm box key located in the office and endeavored to send out an alarm from the box at Tenth avenue and Fifty-fifth street, but failed, probably because in his excitement he did not pull down the hook. There was thus considerable delay in sending out the alarm, which was finally accomplished by a police officer, who saw the fire from his post on Ninth avenue. When Engine Company No. 23 (the first

company) arrived, the fire had communicated to all parts of the building. About 1,200 horses, 150 cars, snow-ploughs, sweepers, etc., 4,000 bales of hay, and 1,200 bushels of grain were destroyed, and the fire extended to the following buildings:

No. 787 Tenth avenue, three-story brick, 25 by 50, slightly damaged.

No. 792 Tenth avenue, three-story frame, 20 by 35, destroyed.

No. 794 Tenth avenue, two-story frame, 25 by 40, destroyed. No. 796 Tenth avenue, two-story frame, 25 by 50, destroyed.

Nos. 798 to 804 Tenth avenue, four wooden shanties, considerably damaged.

No. 806 Tenth avenue, two-story brick, 20 by 35, slightly damaged.

No. 815 Tenth avenue, five-story brick, 25 by 60, considerably damaged.

No. 817 Tenth avenue, five-story brick, 25 by 75, slightly damaged.

Nos. 529 to 533 West Fifty-second street, three five-story brick, 25 by 90, each slightly damaged.

No. 502 West Fifty-third street, two-story brick, 25 by 40, slightly damaged.

No. 504 West Fifty-third street, one-story frame, 20 by 30, slightly damaged.

Rear of No. 506 West Fifty-third street, three-story brick, 25 by 30, slightly damaged.

Nos. 508 to 536 and 545 West Fifty-third street, twelve wooden shanties, destroyed.

No. 505 West Fifty-fourth street, five-story brick, 20 by 40, destroyed.

No. 507 West Fifty-fourth street, five-story brick, 25 by 65, destroyed.

No. 509 West Fifty-fourth street, four-story brick, 25 by 60, destroyed.

No. 525 West Fifty-fourth street, five-story brick, 25 by 65, destroyed.

No. 527 West Fifty-fourth street, five-story brick, 25 by 65, destroyed.

Nos. 529 to 533 West Fifty-fourth street, Nos. 510 to 526 West Fifty-fifth street, three and five-story brick, silk factory, destroyed.

No. 535 West Fifty-fourth street, five-story brick, 25 by 50, slightly damaged.

Rear of No. 542 West Fifty-fourth street, two-story frame, destroyed.

Nos. 524 and 526 West Fifty-fourth street, two-story brick, considerably damaged.

The first alarm was received at 1.20½ A. M. from box 554 (Fifty-fourth street and Ninth avenue), and a third alarm was sent out at 1.25½ A. M. from box 553 (Fifty-fifth street and Tenth avenue). At 2.01 A. M. a simultaneous call (the "three sixes," so-called), summoning all the apparatus due on third alarm at station 341 (Fourteenth street and Broadway), was sent out by direction of the Chief of Department. The fire required the services of twenty-one engine and seven hook and ladder companies, and was under control in three hours. The cause could not be ascertained and the loss amounted to \$592,925.

May 31—Nos. 132 to 138 King street, a nine and ten story brick building, 175 by 100 by 30 feet, occupied as a cotton storage warehouse. The fire originated on the first floor of Nos. 132 and 134, extended thence to all floors and also to Nos. 136 and 138, the different parts of the building being connected on each floor by open archways. The first alarm was received at 6.07 P. M., and at 6.14 P. M. a third alarm was sent out. The services of eleven engine and four hook and ladder companies and of the two floating engines were required, and the fire was under control in five hours. The building was considerably damaged. While on duty with watch-lines at this fire

on the following day, Fireman James Rehill, of Hook and Ladder Company No. 8, was struck by a falling bale of cotton, receiving injuries from which he died within an hour. The cause of the fire was carelessness of employee in using lantern, and the loss amounted to \$175,000.

June 23—Nos. 179 to 183 Lewis street, a six-story brick building, 75 by 60 feet, occupied as a cigar-box manufactory. The fire originated in the basement and extended to the upper part of the building, through the elevator and stairways, considerably damaging the building, and it also extended (slightly damaging the same) to Nos. 820 and 822 Fifth street, a fourstory brick building, 50 by 45 feet, occupied by ship joiners. The first alarm was received at 1 A. M., and second and third alarms were sent out at 1.01½ and 1.07 A. M., respectively. The fire required the services of thirteen engine and four hook and ladder companies, one floating engine, and one watertower, and was under control in two hours. The cause could not be ascertained, and the loss amounted to \$44,375.

June 25—Nos. 31 to 39 East Houston street, a seven-story brick building, 125 by 150 feet, occupied by various parties—printers, lithographers, bookbinders, etc. The fire originated on the fourth floor, and extended to the fifth, sixth and seventh floors by stairway and through belt-holes. There was no stairway from the sixth to the seventh floor on the westerly end of the building, and had it not been for the fire-escapes, the fire could not have been reached and extinguished at that point. The services of five engine and four hook and ladder companies were required, and the fire was under control in twenty-five minutes. The first alarm was received at 9.42 P. M. and the second and third alarms were sent out at 9.46 and 9.47 P. M., respectively. The fire was caused by spontaneous combustion (supposed), and the amount of loss was \$19,250.

June 28—Nos. 536 to 538 East Twentieth street, extending through to Nineteenth street, a three-story brick building, 40

by 200 feet, occupied by manufacturers of tar roofing and sheathing paper. The fire originated on the first floor and extended by stairway and elevator to all parts of the building, which was considerably damaged. The employees attempted to extinguish the fire with the appliances on the premises without giving an alarm, and, consequently, when the department arrived, the fire had extended throughout the entire building. The first alarm was received at 9.20 A. M., and second and third alarms were sent out at 9.25 and 9.49 A. M., respectively. The services of nine engine and four hook and ladder companies, and one floating engine were required, and the fire was under control in one hour and fifteen minutes. The cause was friction of machinery, and the loss \$27,000.

July 2-No. 343 Broadway, a five-story brick building, 25 by 125 feet, occupied by dealers in fireworks, toys, etc. The fire originated in the cellar and extended by way of the stairway and elevator shaft throughout the entire building, which was considerably damaged. Owing to the large quantity of fireworks and combustible material contained in the building. the fire burned with great rapidity, causing the death of two of the employees, Henry Eils and Gustave Hassler. alarm was received at 2.58 P.M., and at 3.03 and 3.08 P.M. respectively, second and third alarms were sent out, followed by special calls for four engine companies. The fire required the services of sixteen engine and four hook and ladder companies, and one water-tower, and was under control in two hours and forty-five minutes, notwithstanding that the supply of water was found to be entirely inadequate. As nearly as it could be ascertained the fire was caused by the ignition of fireworks with a lighted cigar. The loss amounted to \$109,190.

July 3—Nos. 54 and 56 Franklin street, a five-story brick building, 50 by 200 feet, occupied by manufacturing stationers.

The fire originated in the cellar and extended by way of the stairways and elevator shaft throughout the entire building, which was considerably damaged.

The first alarm was received at 5.48 A. M., and at 5.54 and 5.57 A. M., respectively, second and third alarms and subsequently special calls for four engine companies were sent out. The fire required the services of sixteen engine and four hook and ladder companies and one water-tower, and was under control in two hours and thirty minutes. The cause was heat from steam-boiler igniting woodwork and the loss amounted to \$118,600.

July 6-Nos. 117 to 121 West Thirty-eighth street, a fivestory brick building, 75 by 100 feet, occupied as a storage warehouse. The fire originated on the second floor and destroyed the building. The building Nos. 1332 to 1340 Broadway, twostory brick, 100 by 60 feet, occupied for various business purposes, was considerably damaged by falling walls. The first alarm was received at 2.52 A. M. from the special building box located in the building, and at 3 and 3.06 A. M., respectively, second and third alarms were sent out, followed by special calls for two engine companies. The fire required the services of thirteen engine and four hook and ladder companies, and was under control in two hours and fifteen minutes. The companies responding on the first alarm operated inside of the building until the gases with which it became surcharged were ignited by the fire and exploded, driving the firemen out upon the street. Before they could make their escape, however, Foreman Vetter, Engine Company No. 26, Assistant Foreman Delaney, Engine Company No. 1, and Firemen Douglas, Conroy and Trainor, Engine Company No. 1, Curley, Engine Company No. 26, and Breen, Strout and Hanlon, of Engine Company No. 34, were severely burned on their hands and faces and otherwise injured. All have since recovered from their injuries. The cause of the fire could not be ascertained and the loss amounted to \$345,325.

October 17—Nos. 123 and 125 Broad street, a five-story brick building, 50 by 70 feet, occupied for storing molasses and syrups. The fire originated on the first floor and extended throughout the entire building by stairways and elevator shafts, and considerably damaged it. The fire also extended to No. 17 South street, a five-story brick building, 25 by 65 feet, used for office purposes, and considerably damaged it. Nos. 123 and 125 Broad street is a double building, connected on all floors by archways. On the arrival of the first company the building was found to be on fire from the first floor to the roof, and it had also communicated to the rear of the building No. 17 South street through the rear windows, which were not protected with iron shutters, showing that there must have been great delay in sending the alarm.

The first alarm was received at 3.58 A. M., and at 4.02 ½ and 4.07 ½ A. M., respectively, second and third alarms were sent out, followed by special calls for two engine companies, and a floating engine.

The fire required the services of eleven engine companies, four hook and ladder companies, one water-tower, and one floating engine, and was under control in one hour and thirty minutes.

December 15—Nos. 515 and 517 Broadway, a six-story brick (iron and brick front) building, 50 by 200 feet, extending through to Mercer street, occupied by importers of Japanese goods, for storage, etc. The fire originated in the sub-cellar, and extended to the cellar floor, slightly damaging the building. The first alarm was received at 7.33 P. M., and at 7.39½ and 7.40 P. M., respectively, second and third alarms were sent out. The fire required the services of eight engine and four hook and ladder companies, and was under control in thirty minutes. The fire was caused by carelessness with lighted candles, and the loss amounted to \$32,500.

December 15—No. 447 Broadway, a five-story brick, marble front building, 25 by 200, extending through to Mercer street.

occupied by dealers in fancy goods and toys. The fire orig nated in the cellar and extended to the first and second floors slightly damaging the building. This fire was discovered by the members of Engine Company No. 7, who, having been relieved from duty at the fire Nos. 515 and 517 Broadway, were returning to quarters with their apparatus, when they saw smoke issuing from the cellar. They immediately sent out the alarm (at 8.35 P. M.), and went to work. At 8.44 and 8.45 1/2 P. M., respectively, second and third alarms were sent out, followed by special calls for two engine companies. The fire required the services of ten engine and four hook and ladder companies, and was under control in forty minutes. Among the companies on duty at the above fire were the first sections of Engine Companies No. 5, 18 and 27, and the second sections of Engine Company No. 13 and Hook and Ladder Company No. 9. In addition, Engine Companies Nos. 7, 20, 30, 31 and 33 and Hook and Ladder Companies Nos. 1 and 6 were on duty ' at both fires. The cause of the fire could not be ascertained, and the loss amounted to \$70,250.

### Water Consumption.

As nearly as can be estimated, 36,619,000 gallons of water were used by the land engines of the department in extinguishing fires, including the quantity taken from the rivers; and in addition thereto an estimated quantity of 4,800,500 gallons of river water was used by the two floating engines, making an aggregate of 41,419,500 gallons.

#### Meritorious Services.

The following rescues at fires and elsewhere, involving personal risk, were recorded on the Roll of Merit for the year:

Fireman 2d grade David Webb, of Hook and Ladder Company No. 2, rescued Reinhard Simank at a fire in No. 100 West Fifty-sixth street, on the night of January 17. On arriving at the fire a man was heard to cry for help from a window in the

fourth story. An attempt to raise a forty-five-foot ladder was frustrated by the telegraph wires, whereupon the scaling-ladders were used. Fireman Webb was the first to reach a window alongside of another in the third story to which Simank had descended by means of a shutter, and thence assisted him to the scaling-ladder and down to the street.

During the progress of a fire in the basement of No. 84 Park place, on January 22, Fireman 1st grade Francis J. Ouinn. who was directing his company's pipe on the stairway leading to the basement, was overcome by the heat and smoke and fell headlong into the cellar. Assistant Foreman Banta and Fireman 2d grade William Harrigan, of Hook and Ladder Company No. 10, and Fireman 1st grade James Rehill, of Hook and Ladder Company No. 8, in endeavoring to bring him up, were driven out by the smoke and flames. Under cover of two streams of water they again descended, and, although exhausted themselves, succeeded in bringing Fireman Ouinn up to the sidewalk. There being no windows or openings in the rear wall for the escape of the flame and smoke, the entrance from the front was extremely perilous, and but for the prompt and courageous action of Assistant Foreman Banta and Firemen Rehill and Harrigan, Fireman Ouinn would have been suffocated.

At a fire in Nos. 692, 694 and 696 Eighth avenue, on the night of March 4, Firemen 1st grade Patrick O'Brien, of Engine Company No. 54, Patrick Conlon and John D. Dalrymple, of Hook and Ladder Company No. 4, rescued several persons in a manner worthy of special mention. Fireman O'Brien reached the top floor by means of the fire-escape on the front, and passed out to Fireman Gallagy an infant fourteen months old and to Fireman John D. Dalrymple its mother, Henrietta Johnson, aged 25. He then induced Carrie Gray, aged 24, to remain standing on the projecting cap of a window until Fireman Dalrymple returned and assisted her to the street by a scaling-ladder, raised from the top of a thirty-five-foot ladder.

He then searched the rooms until he found Mrs. Johnson, aged 60, partly unconscious, whom he endeavored to pass through the window to the firemen outside. This, owing to the narrowness of the window, was found to be impossible, and he was obliged to leave her to her fate, being compelled by the smoke and flame to leave that position. Fireman Patrick Conlon, Hook and Ladder Company No. 4, assisted William R. Childs, aged 30, and Mrs. Meta Childs, aged 30, to the roof by means of a scuttle, and to prevent the woman from jumping from the roof, he was obliged to hold her, with the help of her husband, until the forty-five-foot ladder was raised to the roof, down which he carried her to the street, followed by her husband. Fireman Dalrymple took Annie Green, aged 35, from the side of a fourth-story window and brought her down a scaling-ladder and the thirty-five-foot ladder to the street.

On the night of April 26, at a fire in Nos. 303 and 305 Water street, Fireman 3d grade Joseph P. Johnson, of Hook and Ladder Company No. 1, carried Christian Petersen, aged 25, from a rear room on the second floor in an insensible condition, through smoke and flame, down the stairway to the street.

Fireman 1st grade Michael P. Crowley, of Engine Company No. 7, rescued Mrs. Howard, aged 72, Peter and John Hughes, aged 3 and 7, respectively, from the burning premises, No. 444 Washington street, on the night of May 14. As the stairways were in flames, cutting off ingress and egress, he climbed up the leader to the second story, broke in the window with his hands, cutting them severely, and entering the room lowered the persons named to the street.

On October 8, Engineer of Steamer John Bulger, Engine Company No. 17, detailed to Engine Company No. 43, while returning from dinner heard the cry of a "man overboard," at the foot of Clinton street, East river, and without removing his uniform plunged in and rescued from drowning Patrick McCarthy, aged 56.

On November 22, Fireman 1st grade Dixon McQueen, of Engine Company No. 51, stopped a runaway horse attached to a delivery wagon in a crowded thoroughfare (Fifteenth street and Sixth avenue), and thereby prevented a serious accident to life and limb at great risk to his own.

On the night of November 23, when Hook and Ladder Company No. 2 arrived at a fire in No. 714 Lexington avenue, a boy was seen on the projecting cap of the front door in a frightened condition, and apparently ready to jump off. Fireman 2d grade David Webb leaped from the apparatus and rushed up the stairway, which was filled with heat and smoke, and brought the boy safely to the sidewalk.

#### The Bennett and Stephenson Medals.

The former of these medals was awarded to Fireman 1st grade Michael Brady, of Engine Company No. 34, for meritorious service rendered in the year 1886, the details of which were given in the report for that year in the following language:

"Fireman 1st grade Michael Brady, of Engine Company No. 34, with the scaling-ladder carried upon the tender of that company, rescued Gustave Schonthaler, aged 38 years, who, upon the arrival of the company, was hanging out of a third-story window of the building No. 232 West Thirty-third street, on December 22. The fire in the building had cut off all means of escape for Schonthaler, and the firemen shouted to him to hold out until help came. Fireman Brady ascended to third floor alone, and under his instructions they alternately held the ladder in descending. It is considered that Fireman Brady in going upon the ladder while it was held by an inexperienced person took considerable risk."

The Stephenson medal was awarded to Foreman Daniel Lawler of Engine Company No. 13, who was adjudged to be the most deserving among the company commanders for 1886. The presentation of both medals took place on the Plaza of

Union Square, on November 12, in the presence of a large concourse of people, and a brigade of the Department which was reviewed at that point.

The presentation was made by his Honor Mayor Abram S. Hewitt.

## Presentation of a Stand of Colors.

Immediately after the presentation of the medals a beautiful and costly stand of colors, consisting of the national flag and an appropriate "Department flag," was presented to the Department on behalf of the following-named subscribers to a fund raised for that purpose through the efforts of the *New York Herald*:

New York Herald	\$500 00
Gutta Percha and Rubber Manufacturing Company	100 00
German-American Insurance Company, New York	100 00
Liverpool and London and Globe Insurance Co	100 00
Atlantic Marine Insurance Company	100 00
Drexel, Morgan & Co., New York	100 00
New York World	100 00
Royal Insurance Company	50 00
Fifty members of the New York Stock Exchange.	50 00
August Belmont & Co	50 00
Phœnix Insurance Company of Brooklyn	25 00
Westchester Fire Insurance Company	25 00
Lancashire Insurance Company	25 00
Commercial Union Insurance Company	25 00
Morton, Bliss & Co	25 00
Phænix Insurance Company of London	25 00
Ætna Insurance Company	25 00
Northern Assurance Company of London	25 00
Clinton Fire Insurance Company, New York	25 00
Niagara Fire Insurance Company, New York	25 00
Ex-Judge Gunning S. Bedford	25 00
Williamsburg City Fire Insurance Company	25 00
Citizens' Insurance Company	25 00

New York and New Haven Automatic Sprinkler		
Company	\$25	00
Guardian Assurance Company	25	00
Hanover Fire Insurance Company	25	00
Insurance Company of North America	25	00
North British Mercantile Insurance Company	25	00
American Fire Insurance Company	25	00
Callanan & Kemp, New York City	10	00
Broadway Insurance Company	10	00
Empire City Insurance Company	10	00
Montauk Fire Insurance Company	10	00
Firemen's Insurance Company	- 10	00
Merchants' Insurance Company	, 10	00
N. Y. Bowery Insurance Company	10	00
Continental Insurance Company	10	00
Eagle Fire Company	10	00
London Assurance Company	10	00
Roosevelt & Boughton	· IO	00
Exchange Insurance Company		00
Washington Fire and Marine Insurance Company		
of Boston	10	00
Fire Insurance Association of London	10	00
Manufacturers and Builders' Fire Insurance Co	10	00
J. Cohen & Son	10	00
John C. Perrin, of the old Volunteer Fire Depart-		
ment	5	00
L. Johnson	5	00
Lizzie Robbins	5	00
H. Schwartzing, per New York World	I	00
Master Jerome Campbell, nine years old	I	00
"Irish-American"	I	00
J. P. F	I	00
Little boy and girl (Ralston and May Reed)		20
Total	\$1,904	20
-		

Mayor Hewitt, in an eloquent address, presented the colors as an evidence of the appreciation of the donors of the efficient services and value of the New York Fire Department, and contrasted the ceremony rewarding faithful and heroic services in the cause of good government, with the sad, impressive and instructive tragedy of the preceding day in the city of Chicago—punishing the perpetration of a crime against law and order.

President Purroy, in accepting the flags, said:

"Mr. Mayor and Gentlemen of the Committee: On behalf of the Fire Department I accept with feelings of the deepest pride these splendid evidences of the high esteem in which the city of New York holds those who have served her fearlessly and faithfully. It is an acknowledged fact that there is no such potent incentive to the performance of duty and to heroic deeds as is the approval of one's fellow-citizens, and I am confident that I voice with accuracy the sincere sentiments of all the members of the uniformed force of this department when I say, that whatever dangers they have calmly faced, whatever self-sacrifices they have patiently undergone, are all repaid to-day a thousand-fold by this presentation, as well as by the words of commendation which have just fallen from the lips of their distinguished Chief Magistrate.

"Mr. Mayor, the firemen of New York gratefully accept these beautiful flags. They will always guard them with jealous care, and deeming them among their richest treasures, they will hand them down absolutely unsullied to those who in the course of time will succeed them in their arduous but ennobling duties."

### Life Saving Corps and School of Instruction.

The records show that out of a total of 960 officers and men in the uniformed force at the close of the year, 604 had passed through the school and received their certificates since the introduction of the system in 1882.

The practical value of this training was again conspicuously demonstrated, as the instances of rescues at fires recorded under the head of "Meritorious Services" in this report will show.

53

Casualties.

of the Department at, and in responding to alarms for fires, as nearly as could be ascertained, are The number of human lives lost and persons injured at fires and in connection with the operation shown by the subjoined table:

ZE ZE		Total.	231	98	co	302
AGGREGATE KILLED AND	INJURED.	Responding to Alarms.	23	m	:	26
AGG	ΙχΊ	At Fires.	148	95	3	246
		Total.	201	98	8	301
	TOTAL.	Responding to Alarms.	53	e	:	56
		At Fires.	148	95	6	245
		Total.	172	54	:	226
RED.	SLIGHTLY	Responding to Alarms.	42	01	:	44
INJURED.	18	At Fires.	130	52	:	182
	LY.	Total.	25	33	:	58
	SERIOUSLY.	Responding to Alarms.	10	н	:	ii.
	SEF	At Fires.	15	32	:	47
	v.	Total.	4	II	03	17
	FATALLY.	Responding to Alarms.	н	:	:	н
	FA	At Fires.	3	11	01	10
		Total.	:	:	н	н
77	Tarie I	Responding to Alarms,	:	:	:,	:
7	4	At Fires.	:	:	н	н
			Members of Department	Others—Before arrival of Department	" After arrival of Department	Total

#### Rope Fire-escapes in Hotels.

Under the provisions of chapter 720 of the Laws of 1887, the uniformed force inspected all the hotels in the city over two stories high, and the Chief of Department reported the result to the Mayor, as the law requires. 246 hotels were thus inspected, of which number a re-inspection showed that 228 had not complied with the requirements.

Strength of Uniformed Force, Number of Fires, with Losses, Population, Number of Buildings, etc., from 1866 to 1887.

							1000000000			
	Uni	RENGTH OF FORMED ORCE,	Fires.	oî.	oss per Fire.	Years.	of Inhabit- each Fire-	of Inhabit- each Fire.	f Buildings.	of Build- each Fire.
YEAR.	No. of Companies.	No. of Officers and Men.	Number of	Loss by Fire.	Average Loss	Population, Census	Number of ants to ea man.	Number of ants to ea	Number of B	Number of Build- ings to each Fire.
1866	54	*964	796	\$6,428,000 00	\$8,075 38	‡ <del>7</del> 69,553	798	967	§64,0∞	80
1867	54	*919	873	5,711,000 00	6,541 81					
τ868	52	592	740	4,342,000 00	5,867 57					
186g	52	599	850	2,696,393 00	3,172 23					
1870	52	596	964	2,120,212 00	2,199 39	942,292	1,581	977		
1871	52	596	1,258	2,127,356 00	1,691 05					
1872	52	595	1,649	2,891,818 00	1,753 67					
1873	54	65 <b>1</b>	1,470	4,022,640 00	2,736 48					
1874	64	†712	1,355	1,430,306 00	1,055 58					
1875	67	748	1,418	2,472,536 00	1,743 67	1,041,286	1,392	734	134,200	59
1876	68	747	1,382	3,851,213 00	2,786 70					
1877	65	752	1,450	3,210,695 00	2,214 27					
1878	65	727	1,654	1,884,505 00	1,139 36					
1879	64	729	1,551	5,671,580 00	3,656 72					
1880	65	748	1,783	3,183,440 00	1,785 44	1,205,299	1,613	676		
1881	66	769	1,785	5,820,259 00	3,260 55					
1882	67	826	2,001	4,195,960 00	2,095 43				ro2,624	51
1883	68	895	2,169	3,512,848 00	1,619 37				1101,735	47
1884	70	919	2,406	3,474,547 00	1,444 12					
1885	71	927	2,479	3,789,283 00	1,528 55				1104,250	42
1886	71	951	2,415	3,340,810 00	1,383 35					
1887	74	960	2,929	5,585,425 00	1,917 28	•••••				
Total,	22 y	ears	35,377	\$81,762,826 00	\$2,311 19		• • • • • • • • • • • • • • • • • • • •	••••		

<sup>\*</sup> Includes about 400 volunteer firemen.

<sup>†</sup> Annexation of territory north and east of Harlem river. ‡ Estimate based on census of 1865. § Estimate based on report of Superintendent of Buildings, fourth quarter, 1875 and exclusive of sheds, bridges and piers.

|| Exclusive of sheds, bridges and piers.

BUREAU OF FIRE MARSHAL.

Losses and Insurance.

	JANUARY.	FEBRUARY.	Максн.	APR L.	May.	JUNE.	Jurv.
Estimated loss— On buildings and vessels	\$113,391 00	\$256,660 00	\$99,912 00	#121,584 oo	\$444,454 00	\$47,837 00	\$127,129 00
On contents	\$11,772 00	469,750 00 \$725,410 00	435,307 oo \$535,279 co	382,871 oo	\$54,982 00 \$1,299,436 00	117,902 oo	\$834,617 00
Estimated insurance— On buildings and vess: Is	\$2,207,400 00 2,755,070 00		\$1,672,3c0 co \$1,989,cc0 co 1,786,375 co	#1,551,175 00 1,250,052 00	\$1,865,000 00 \$1,014,350 00 1,962,800 00 672,255 00	\$1,014,350 00	#1,891,450 ∞ 3,694,766 ∞
Total	\$4,962,470 oo	\$3,458,60c oo	\$3,945,375 00	\$2,801,227 00	\$3,827,800 00 \$1,686,605 00	∯r,686,605 oo	\$5,586,216 co
Estimated uninsured loss—  On buildings and vessels  On contents	\$11,957 00 19,852 00	\$200,885 00 9,133 00	\$1,642 00	\$1,787 00 14,586 00	\$58,417 00	\$1,040 00 1,557 00	\$1,825 00
Total	\$31,809 00	\$210,018 00	<b>#3,864</b> oo	\$16,373 00	\$281,595 00	\$2,597 00	\$105,525 00
Average loss per fire	\$2,447 69	\$3,442 6r	\$2,132 19	\$1,955 23	\$5,437 05	\$793 29	\$2,243 59

	August.	September,	Остовек.	November.	<b>D</b> есемвек.	YEAR.
Estimated loss— On buildings and vessels	\$18,595 00	\$27,343 00	\$42,055 00 110,119 00	\$41,203 00	\$60,933 00 282,394 00	\$1,401,096 00
Total	\$92,383 00	\$115,162 00	\$152,174 00	\$190,420 oo	\$343,327 00	\$5,584,625 00
Estimated insurance— On buildings and vessels On contents	\$773,500 00 634,189 00	\$1,390,800 00	\$1,238,650 00 613,250 co	\$773.500 00 \$1,230,800 00 \$1,238,650 00 \$1,598,300 00 \$1,630,700 00 \$18,822,625 00 \$34,189 00 721,610 00 613,250 00 1,504,845 00 2,140,705 00 19,692,217 00	\$1,630,700 00	\$18,822,625 ∞ 19,692,217 ∞
Total	\$1,407,689 00	\$2,112,410 00	\$1,851,900 00	\$3,103,145 00	\$3,771,405 00	\$38,514,842 00
Estimated uninsured loss— On buildings and vessels On contents	\$71 00	\$1,637 00	\$145 00	\$345 00	\$798 co	\$310,549 00 387,945 00
Total	\$1,743 00	\$9,025 00	\$11,361 00	\$13,404 oo	\$11,180 00	\$698,494 co
Average loss per fire	\$473.75	\$584 58	\$704 95	\$780 41	\$1,221 8c	\$1,906 90

Extent of Loss at Fires.

Loss less than—		\$50 at 1,763 fires.	100 at 1,992 "	1,000 at 2,599 "	5,000 at 2,799 "	10,000 at 2,847 "	20,000 at 2,881 "	30,000 at 2,892 "	40,000 at 2,902 "	50,000 at 2,909 "	60,000 at 2,910 "	70,000 at 2,912 "	80,000 at 2,913 "	90,000 at 2,917 "	100,000 at 2,918 "	125,000 at 2,9.:2 "	150,000 at 2,923 "	200,000 at 2,926 "	350,000 at 2,927 "	500,000 at 2,928 "	600,000 at 2,929 "	
PERCENTAGE TO WHOLE NUMBER OF FIRES.	-37	.23	80.	.21	.07																	
YEAR.	1,090	673	229	209	200	48	34	11	IO	7	н	N	н	4	н	4	I	n	н	н	н	2,929
DEC.	ros	57	22	99	91	9	4	8	81	:	:	:	н	:	:	:	:	:	:	:	:	281
Nov.	83	55	17	99	81	7	3	:	:	н	:	:	:	:	:	:	:	:	:	:	:	244
Ocr.	92	55	16	32	15	3	61	н	н	:	:	:	:	:	:	:	:	:	:	:	:	217
SEPT.	81	44	6I	36	11	4	:	н	I	:	:	:	:	:	:	:	:	:	:	:	:	197
Aug.	8	49	81	33	∞	Ŋ	81	:	:	:	:	:	:	:	:	:	:	:	:	:	:	195
MAY. JUNE, JULY.	147	117	23	20	2.1	8	I	:	I	н	:	:	:	:	:	3	:	:	I	:	:	372
JUNE.	8	52	10	36	15	3	I	I	:	н	:	:	:	:	:	:	:	:	:	:	:	209
	06	44	21	57	15	4	2	:	:	н	:	:	:	-	:	:	н	Ø	:	:	I	239
APR.	96	54	17	09	17	4	4	81	I	н	н	:	:	:	:	:	:	I	:	:	:	258
MAR.	72	28	22	65	81	4	Ŋ	н	8	I	:	н	:	H	I	:	:	:	:	:	:	251
FEB.	9	43	19	64	18	8	3	:	:	:	:	:	:	:	:	н	:	:	:	н	:	211
Jan.	6	45	20	48	88	4	7	т	8	н	:	н	:	8	:	:	:	:	:	:	:	255
	Nominal or less than \$10	Between \$10 and \$50	50 " Ioo	1,000 ,, ool	I,coo " 5,000	5,000 " IO,000	10,000 " 20,000	20,000 " 30,000	30,000 " 40,000	40,000 " 50,000	20,000 " 60,000	,, 000,009	70,000 " 80,000,07	80,000 " 000,08	,, 000,000	100,000 " 125,000	125,000 " 150,000	150,000 " 200,000	325,000 " 350,000	450,000 " 500,000	600,000 " coo,003	

	Cause,										
			CAUSE.								
Origin.	Accidental,	Carelessness.	Defective, Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.					
In Heating.											
Beams built into chimneys and fireplaces.	}		3								
Chimneys, fireplaces, flues, grates, etc			62		14						
Foul chimneys		175									
Kerosene-oil used in lighting fires		8									
Kerosene-oil stove taking fire	1										
Matches, tapers, etc., used in starting fires, igniting merchandise, etc	1	2			}						
Soot in flues and fireplaces igniting woodwork		42									
pipes, etc., igniting woodwork, clothing, etc	24	12									
Steam-pipes igniting floor beams, wood- work, etc	4										
Stoves, boilers, furnaces, stove and heater pipes, igniting bedding, clothing, woodwork, etc	60	113	\								
Stoves, furnaces and grates, hot coals falling from	8	2	}		I						
Stoves upsetting	4	3		••							
Total number of fires	101	357	65		ı						
Total loss	\$105,961	\$86,693	\$56,057		\$5						
					-						
In Illuminating.											
Electric-lights, sparks from	22		••	1							
Gas, explosion of	2	••									
Gas-meters, explosion of	ı										
Gas escaping and igniting	23	26		••							
dows, and bedding, straw, wood- work, rubbish, etc	6	238									
Lamps, kerosene-oil, breaking	8	3	/								
Lamps, kerosene-oil, exploding		2									
Lamps, kerosene-oil, falling	, ,	38									
	3-										

# Cause of Fires.

						-									
Cause.	1	Prem	ISES	W <sub>H</sub>	ERE	IN E	IRE	ORI	GINA	TED	Оссі	PIE	D AS-	-	nts.
Not Ascertained.	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Offices.	Restaurants and Saloons,	Storehouses.	Stables,	Places of Amusement and Recreation.	Religious and Educa- tional Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
3	2		I		••	••	•••							3	\$4,507 00
62	43	4	8		3	••	•••	1	2		••		1	62	51,550 ∞
175	163	7	4		I			••		••	• • •		••	175	30 00
8	8					••		••		••				8	125 00
т				••	••		••		•••				1	1	100 00
2	I		1				••	•••					••	2	3,815 00
42	34	4	2		2							• •		42	5,492 00
36	18	3	11	1			2						ı	36	24,641 00
. 4	r		2									1		4	5,285 00
173	121	12	23	2	3		4	I	1		••		6	173	150,303 00
11	7		2	I	1						•			11	2,790 00
7	5		1		1									7	66 00
524	403	30	55	4	11		6	2	3			1	9	524	
															\$248,716 00
\ <u></u>	= =	_	=	=	=	=	=	=	=	=		=	=	==	
22	1	6	2	3	2			4	1		ı	I	1	22	\$96,045 00
2	2													2	235 00
		1												1	2,5 50
. 49	26	8	8		ı	т						Ш	3	49	72,525 00
244	179	27	20	2	6	1	2	3	4					244	352,846 00
1					ı									1	25 00
11	8		2	1										11	22,698 00
177	158	4	9	I	1		I				I		2	177	43,571 00
70	62	ı	7											70	15,749 00
	17			1					1						3,717

	3		Cause			
Origin.	Accidental.	Cárelessness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.
Lamps, kerosene-oil, upsetting	5	77				
Lamps, kerosene-oil, taking fire	10	3	)			
Matches, lighted tapers, etc., igniting clothing, woodwork, rubbish, etc	1	129				
Total number of fires	286	516				
Total loss	\$234,549	\$609,752				
		===				
In Manufacturing and other Business.						
Alcohol, tar, gum, oils, paints, varnish, etc., igniting on stoves, furnaces, over gas-lights, etc	32	6	••			
Bursting of oil pipe, oil igniting	I	••	••		••	
Chemicals igniting	I		••			••
Chimneys, flues, etc., heat from igniting woodwork		••	8			
Cotton, jute, etc., igniting	1			••		••
Foul chimneys		12				
Friction of machinery	14				]	
Gas stoves, gas-lights, igniting woodwork, paper, merchandise, etc	3	3				
Ham, meats, etc., in ovens and smoke- houses, igniting	5			••		
dise, etc	••	3	••	••		••
Inflammable material, ignition of  Kerosene-oil stoves bursting, taking fire,	••	1		••		••
etc	3	1		••		••
Lamps, alcohol, exploding and taking fire.	3	2		••		••
Lime, slaking of	3		(			••
Naphtha and benzine vapor igniting	11	8				••
Sulphur igniting in handling		I				
Scenery in theatres igniting from gas- lights, etc	ı	••				
engines, steamships, locomotives, etc., igniting roofs, shavings, wood-work, etc	89	19				••
Soot in stove-pipes, chimneys, etc	••	2			}	••
Steam-pipes igniting merchandise	7	2				••

vi.		AS-	PIED	Эсси	TED (	GINA'	Ori	IRE	n F	ERE	Wн	ISES	PREM	I	E.	Causi
Aggregate Loss to Structures and Contents.	Total.	Miscellaneous.	Vessels.	Piers, Docks, etc.	Lumber, Coal and Wood Yards.	Religious and Educa- tional Institutions.	Places of Amusement and Recreation.	Stables.	Storehouses.	Restaurants and Saloons.	Offices.	Manufactories and Workshops.	Mercantile Establishments.	Dwellings.	Total.	Not Ascertained,
\$1,319 00	82	1	1							2		4	1	73	82	
210 00	13	1	1				1				1			9	13	
239,078 00	130	1				1	ı	13			3	22	14	75	130	
	802	9	3	2		6	10	17	2	13	11	74	62	593	802	
\$844,301 00															\	
\$65,221 00	38	••		••	••	••				6	1	24	3	4	38	
28,200 00	I	I				••			••					• •	1	••
600 00	1								•••				1		I	
13,695 ∞	8	••		••	••		••	••	••	1	• •	7	)	••	8	
1,575 ∞	ı			••				••	••	••			I		1	••
•••••	12				••				••	I	• •	8		3	12	
49,455 00	14	••		••		••		••		••	••	14			14	
51,810 00	6	••				1			••	••		4	I	••	6	••
2,400 00	5	••		••				••	••	•••		5			5	1
1,570 ∞	3		1	••				••	••	••		2			3	
	1	••		••			• •	••	••	••	•••	I			1	
45 ∞	4	••		••				••	••	••	••	4	••		4	
175 00	5	•• )		••	••	••		••	••	••	••	2	I	2	5	
4,452 00	3	1		••	1	••		1	•••	••	••	••	••		3	
44,872 00	19		••	••					••	•		12	6	1	19	
450 00	1		••	••	••			••	••	••	••	1			ı	
	1	••		••			I				••	••	••	••	I	
692,311 00	108	15	2	1	ı		1	2		2	1	46	23	14	108	
65 00	2	••	••	••					•••		••	1		1	2	
217,650 00	9								••		1	7		I	9	

	0		Caus	E.		
Origin.	Accidental.	Carelessness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.
Spontaneous combustion of oily rags, etc	47	3				
Stoves, boilers, furnaces, ovens, etc., igniting merchandise, shavings, etc.	39	24				
Stoves, furnace, etc., hot coals falling from	7	9				
Stoves upsetting		r				
Vitriol, acids, spirits, etc., carboys of, breaking, or vapor igniting	2					
Workmen burning rubbish	••	1				••
Total number of fires	269	98	8			
Total loss	\$1,562,066	\$86,953	\$13,695			
Miscellaneous.					\	
Benzine, gasoline, vapor igniting	3					
Bonfires				21		
Charcoal fire igniting woodwork	ı					
Cigars, pipes, etc., smoking of		220	)	3		
Defective flues and chimneys			10			
Fat, glue, varnish, etc., taking fire on stoves, etc	17	5				
Firecrackers		75		38	2	
Fireworks, rockets, etc	I	29		3		
Foul chimneys	8	14 .				
Gas stoves, leak in pipe	3		••			
Hot ashes igniting woodwork	}	35	(			
Inflammable material, ignition of			}		r	
Kerosene-oil poured over woodwork and ignited				2	2	2
Kerosene-oil stoves falling	3	r				
Kerosene-oil stoves exploding	3		٠,			
Kerosene-oil stoves upsetting	3	11				
Kerosene-oil stoves taking fire	71	I				••
Kerosene-oil placed on stove						ı
Kerosene-oil used in starting fire in stove.	/	ı				

															71	
ents.		AS-	PIED	CCU		_		IRE	N F	ERE	WH	ISES				Cause
Aggregate Loss to Structures and Contents.	Total.	Miscellaneous.	Vessels.	Piers, Docks, etc.	Lumber, Coal and Wood Yards.	Religious and Educa- tional Institutions.	Places of Amusement and Recreation.	Stables.	Storehouses.	Restaurants and Saloons.	Offices.	Manufactories and Workshops.	Mercantile Establishments.	Dwellings.	Total.	Not Ascertained.
\$228,720 00	50		T	1	1				1	1	1	39	2	3	50	
253,336 00	63		1		r			1		8	1	34	7	10	63	
5,215 00	16	1	1							ı		4	1	8	16	
	I											1			1	
810 00	2	2													2	
2 00	1													ı	1	
	375	20	6		4	1	2	4		20	5	216	46	48	375	
\$1,662,714 00																
		=		_	_	=	=	=	=	=	=	=	-	_		
\$258 00	3	••	I				••	•••			••			2	3	••
417 00	21	14			τ	••	1	1		••	••		I	3	21	
	1	••		••		••	••	••	••	••			••	1	1	
212,711 00	223	. 8	2	2		••	4	17	••	5	9	57	42	77	223	
2,808 00	10			••				••		1		2		7	10	••
268 co	22											1		21	22	
24,306 00	117	9		••		1		4		10		18	21	54	117	2
110,584 00	34	I						1		1		5	3	23	34	I
•••••	14													14	14	••
7 00	3													3	3	
69,810 00	35					1				3	3	9	4	15	35	
	1			1											1	
47 00	6										ı			5	6	
214 00	4													4	4	
25 ∞	3													3	3	
750 00	14													14	14	
5,213 00	72	2							)					70	72	1
	1													1	I	••
	I						1							1	1	

		Cause.										
Origin.		Accidental.	Carelessness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.					
Matches, children playing	g with				199							
Matches gnawed by rats	and mice		20	(								
Matches igniting awning bish, woodwork, etc.	gs, straw, rub-	7	208	}	18	16	22					
Not ascertained							••					
Phosphorus igniting				\			I					
Rekindling of previous fir	е			\								
Sparks from distant fire.		4										
Sparks from previous fire		1										
Soot ignited in fireplaces	and flues		4									
Sulphur igniting clothing		ı			•• .							
Sparks from chimneys, st	oves, etc	8	2	••								
Spontaneous combustion etc		7	2									
Stoves, stove-pipes, etc., ing woodwork, etc Thawing out water-pipe lamps lighted, papers		10										
Total number of	fires	134	640	10	284	21	26					
Total loss	\$18,735	\$730,963	\$2,808	\$48,133	\$2,227	\$3,719						
Recapitula	TION.											
	(Number of fires.	101	357	65		1						
In Heating	Loss	\$105,961	\$86,693	\$56,057		\$5						
	(Number of fires.	286	516									
In Illuminating	{Loss	\$234,549	\$609,752									
	(Number of fires.	269	98	8								
In Manufacturing, etc.	{Loss	\$1,562,066	\$86,953	\$13,695								
v 26' 11	(Number of fires.	134	640	10	284	21	26					
In Miscellaneous	{Loss	\$18,735	\$730,963	\$2,808	\$48,133	\$2,227	\$3,719					
A	(Number of fires.	790	1,611	83	284	22	26					
Aggregate	\$1,921,311	\$1,514,361	\$72,560	\$48,133	\$2,232	\$3, <b>7</b> 19						

Causi	€.		PREM	ISES	WH	ERE	IN I	FIRE	ORI	GINA	TED	Осси	PIEI	D AS		ents.
Not Ascertained.	Total.	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Offices.	Restaurants and Saloons.	Storehouses.	Stables,	Places of Amusement and Recreation.	Religious and Educa- tional Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous,	Total,	Aggregate Loss to Structures and Contents.
	199	192	2		1			2				٠.		2	199	\$28,494 00
	20	6	5	4	I		2			ı		ı			20	10,515 00
	271	162	24	42	5	8	1	11	2	2	2	1	1	10	271	328,857 00
106	106	23	30	45	1	3	τ	2					1		106	1,991,819 00
	ı												I		1	
4	4			I			• •							3	4	30,000 00
(	4	I	1	ı		I									4	780 00
	ı			I	••	••				••					1	5 00
	4	4			• •		•••		••	••					4	15 00
	I	1			٠.	••		• •		• •					ı	507 00
	10	8	ı	1		••				• •					10	135 00
	9	4	2	2						••				1	9	10,015 00
	3	3			••			••							3	30 00
	10	9	1	••					••	••	•••				10	309 00
113	1,228	731	137	189	21	32	4	38	7	5	3	5	6	50	1,228	
\$2,022,309	••••															\$2,828,894 00
	=			=	=	=	=	=	=	=		=	=	===	-	
	524	403	30	55	4	11		6	2	3			ı	9	524	
																\$248,716 oo
	802	593	62	74	ıτ	13	2	17	10	6		2	3	9	802	
																844,301 00
	375	48	46	216	5	20	I	4	2	I	4	2	6	20	375	
																1,662,714 ∞
113	1,228	731	137	189	21	32	4	38	7	5	3	5	6	50	1,228	
\$2,022,309																2,828,894 00
113	2,929	1,775	275	534	41	<del>7</del> 6	7	65	21	15	7	9	16	88	2,929	
\$2,022,309																\$5,584,625 00

66

# Origin (Consolidated) and Cause

	CAUSE.										
Origin, by Months.	Accidental.	Carelessness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.	Not Ascertained.	Total.			
In Heating.											
January	24	48	4		I			77			
February	9	35	10			!		54			
March	12	48	7					67			
April	12	44	9					65			
May	4	35	ı					40			
June	I	27	5			)		33			
July											
August			/								
September	2	23	6			}	)	31			
October	5	25	7					. 37			
November	7	33	9			\		49			
December	25	39	7			}		71			
Total	101	357	65		I			524			
In Illuminating.											
January	20	50						70			
February	19	33						52			
March	22	41		٫۰۰		••		63			
April	20	45						65			
May	36	41					••	77			
June	19	29						48			
July	25	55						80			
August	16	34		ļ				50			
September	24	39						63			

of Fires, etc., by Months.

		PREMIS	ses W	HERI	EIN F	IRE	Origi	NATED	Occu	PIED	AS—		1	its
Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Отсея.	Restaurants and Saloons.	Storehouses.	Stables.	Places of Amusement and Recreation.	Religious and Educational Institutions.	Lumber, Coaland Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
58	7	7		3				2					77	\$35,939 00
33	5	13	ı	ı								ĭ	54	37,665 00
49	4	11		ı		1				٠		ı	67	54,710 00
55	ı	3		2		ı	ı		}		ı	ı	65	4,637 00
37	ı	2											40	1,160 00
31				2								)	33	6,305 00
														••••••
27	2	1						1					31	37,462 00
29	3	2										3	37	4,182 00
36	1	6		2		2	ı					1	49	13,560 00
48	6	10	3			2						2	71	53,096 co
403	30	55	4	11		6	2	3			ı	9	524	\$248,716 00
-	=						-	=	=	=	=		•	
58	6	4	I	••		1				••			70	\$33,730 00
42	2	4	••	2		••	1					I	52	11,913 00
39	II	9	••	1		••		I		••	I	I	63	171,044 00
54	3	4	••	••		4			••	••	••	••	65	29,884 00
57	3	8	3		I	1	I	2		••		I	77	229,855 00
35	3	3	3	1			1	2					48	11,271 00
61	8	5	2	2		1				••		1	80	146,567 00
33	7	5		2			1			•••	I	1	50	30,487 00
51	2	4		I	I	1	ı			1		ı	63	32,020 00

				Cat	J9E.			
Origin, by Months.	Accidental.	Carelessness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.	Not Ascertained.	Total.
October	34	49						83
November	23	45						68
December	28	55			••			83
Total	286	516						802
In Manufacturing and other Business.								
January	18	12						30
February	15	4	1					20
March	32	4					}	36
April	29	8	3					40
May	28	6	2					36
June	30	11					}	41
July	21	13	••		••			34
August	25	4						29
September	21	7	••		••		••	28
October	12	12	2				••	26
November	23	8						31
December	15	9	••				••	24
Total	269	98	8		••			375
Miscellaneous.								
January	6	48		18	2		4	78
February	6	43		22	ı	3	10	85
March	4	49		17	4	2	9	85
April	8	52		15	ı	1	11	88
May	11	47		21	ı		6	86

-			Premi	ses W	HER	EIN ]	FIRE	Origi	NATEI	Осс	UPIED	AS-			ents.
	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Оffices.	Restaurants and Saloons.	Storehouses.	Stables.	Places of Amusement and Recreation.	Religious and Educational Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
1	50	5	12	2	3		5	3	ı				2	83	\$41,101 00
	52	2	9		I			ı			ı	1	. 1	68	60,782 00
	61	10	7				4	1	)	)				83	45,647 00
1	593	62	74	11	13	2	17	10	6		2	3	9	802	\$844,301 00
		_	==	=				==	=	=		==			
	3	3	21		2						1			30	\$171,706 00
	2	2	11	2	ı					1		ı		20	501,795 00
	5	5	24		ı								ı	36	91,090 00
	2	6	24		1	1	2		1			ı	2	40	144,758 00
	3	4	22		6								1	36	345,275 00
	4	6	24	ı	3		1			I			1	41	62,480 00
	4	8	16	ı	3		1						1	34	159,496 00
	2	7	15										5	29	25,117 00
	6	2	13	ı	ı			ı			1	1	2	28	19,595 00
ı	7	I	15							ı			2	26	53,576 00
	4	2	17		ı			••		I		2	4	31	45,054 00
	6	••	<b>14</b>		1	••		1				1	1	24	42,772 00
	48	46	216	5	20	1	4	2	1	4	2	6	20	375	\$1,662,714 00
	45	11	15	I	1		2	1	I			••	1	78	\$383 <b>,7</b> 88 00
	49	12	13	2	2	••	4		••	••	1	2		85	175,037 00
	48	9	15	I	3		2		1		••	••	6	85	218,435 00
	45	18	17	2	2	1			••	••		I	2	88	325,176 00
	49	7	16	I	2		4	2	1	,			4	86	723,146 00

				CAU	BE.		_	
ORIGIN, BY MONTHS.	Accidental.	Carelessness.	Defective Buildings and Construction.	Mischievousness,	Maliciousness.	Incendiarism.	Not Ascertained.	Total.
June	7	40		29	ı	ı	9	87
July	31	145	6	53	2		21	258
August	23	53	4	19	ı	5	11	116
September	13	38		12	3	5	4	75
October	9	32		20		I	9	71
November	5	41		37		6	7	96
December	11	52		21	5	2	12	103
Total	134	640	10	284	21	26	113	1,228
Aggregate	790	1,611	83	284	22	26	113	2,929

		Premi	ses W	HER	EIN H	TIRE	Origi	NATEL	Осст	JPIED	AS—			tents,
Dwellings.	Mercanti'e Establishments.	Manufactories and Workshops.	Offices.	Restaurants and Saloons.	Storehouses.	Stables.	Places of Amusement and Recreation.	Religious and Educational Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
42	9	17	1	2		6	2	ı	ı		I	5	87	\$85,743 00
154	33	38		12	I	5		1		1		13	258	528,554 00
79	12	18	3	I		I				I	ı		116	36,779 00
50	3	9	3			ı			ı	ı		7	75	26,085 00
36	8	12	3	ı		4			I		I	5	71	53,315 ∞
68	7	8	ı	2	ı	3				ı		5	96	71,024 00
66	8	ıı	3	4	1	6	2					2	103	201,812 00
731	137	189	21	32	4	38	7	5	3	5	6	50	1,228	\$2,828,894 00
1,775	275	534	41	76	7	65	21	15	7	ò	16	88	2,929	

Origin of Fires by Districts and Months.

First District -- Part of City lying south of Chambers Street.

	Total,	\$135,913 00	23,478 00	120,995 00	125,480 00	20,340 00	6,840 00	00 066'6	7,685 ∞	17,035 00	42,973 00	53,870 co	3,575 00	\$568,174 00	fire 33 ich fire 20	ire 22
Loss.	Contents.	\$107,444 00	18,220 00	87,595 00	108,095 00	16,735 00	00 090'9	00 088'9	6,180 00	14,325 00	27,598 00	41,755 00	2,445 00	\$443,332 00	ings to each	ngs to each fi
	.egnibling	\$28,469 00	5,258 00	33,400 00	17,385 00	3,605 00	780 00	3,110 00	1,505 00	2,710 00	15,375 00	12,115 00	1,130 00	\$124,842 00	Number of dwellings to each fire Number of business places to each fire	Number of buildings to each fire
RES.	Total.	18	28	22	28	23	12	61	18	17	8	20	91	241	Z Z un	Nun
OF F1	Other Places.	:	04	63	н	н	н	01	8	61	3	64	:	188	72 1	53
NUMBER OF FIRES	Business.	15	21	18	22	22	OI	17	14	∞	17	14	14	192	ngs re	Total fires in buildings 223
NUM	Dwellings.	3	ıΩ	N	72	:	н	:	61	7	:	4	C)	31	buildin	gs
ous.	Total.	3	1.2	6	14	6	4	5	13	9	01	9	9	97	llings ness 1	nildin
MISCELLANEOUS.	Other Places.	:	н	01	н	:	н	н	I	1	н	:	:	6	dwel	in bu
CELL	Business.	n	II	9	13	6	33	4	OI	4	6	4	r.	81	es in	fires
Mis	Dwellings.	:	•	н	:	:	:	:	8	н	:	8	н	7	of fir of fir	Fotal
AND SS.	Total.	ъ	2	Ŋ	5	<sub>∞</sub>	70	6	4	4	8	9	81	9	Number of fires in dwellings 31 Number of fires in business buildings 192	
TURING	Other Places.	:	:	:	:	:	:	:	I	I	:	н	:	ر د	-	
IN MANUFACTURING AND OTHER BUSINESS.	Business.	70	+	10	'n	∞	75	6	8	3	O	ıΩ	8	56	885/— 1,012 3,805	4,817
In M.	Dwellings.	:	н	:	:	:	:	:	:	:	:	:	:	н	ration in 1885.— 1,012	4,817
ING.	Total.	7.0	3	3	3	2	8	75	н	20	Ŋ	22	rv.	47	eratio	
INAT	Other Places.	:	:	:	:	н	:	н	:	:	н	н	:	4	unu	
LLUM	Business.	4	81	3	N	4	N	4	н	I	4	3	4	34	per e	
IN LLUMINATING.	Dwellings.	н	н	:	н	:	:	:	:	4	:	н	н	6	et (as	Total
rá	Total.	2	∞	22	9	н	н	:	:	8	3	m	n	37	istric	
ATING	Other Places.	:	н	:	:	:	:	:	:	:	н	:	:	1 0	s in d	
In Heating.	Business.	60	4	4	61	н	:	:	:	:	81	01	6	21	lding	tal
Z	Dwellings.	63	co	н	4	:	н	:	:	8	:	н	:	14	f buil	To
	Момтнѕ.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)— Dwellings. 1,0 Business. 3,3	

second District-Part of City lying between Chambers and Houston Streets, west of West Broadway and South Fifth Avenue.

		4 00	2 00	00 0	390 00	8	00 0	5 00	2 00	00 1/8/1	1,075 00	co o81,1	00 0	5 00	37 17	88
	T'otal.	\$16,624 00	493,665 00	930	39	179,450 00	14,920 00	825	12,705 00	1,87	1,07	1,18	35,250 00	\$759,885 00		
Loss.	Contents.	\$14,549 co	285,285 00	530 00	215 00	152,685 00	13,310 00	550 00	11,885 00	1,346 00	1,030 00	105 00	32,020 00	\$513 510 00	ings to each f	ngs to each fir
	.egnibling	\$2,075 00	208,380 00	4:0 00	175 00	26,765 00	00 019,1	275 00	820 00	525 00	45 00	1,075 00	4,230 00	\$246,375 00	Number of dwellings to each fire Number of business places to each fire	Number of buildings to each fire
NUMBER OF FIRES.	Total.	6	11	o.	IO	15	OI	15	6	12	∞	9	17	131	NZ Zu Zu	Nur
OF I	Other Places.	н	н	н	н	:	:	н	:	61	н	н	н	OI OI	67	121
IBER	Business.	4	4	3	4	9	9	9	4	3	3	(1)	6	54	ngs	:
NON	Dwellings.	4	9	70	ιn	6	4	∞	νŋ	7	4	3	7	67	iplin	 82.:-
us.	Total.	O.	9	3	N	7	7	II	7	N	04	н	9	56	ings tess b	ildin
INEO	Other Places.	-	:	:	:		:	H	:	н	н	:	н	20	dwell	in bu
MISCELLANEOUS.	Business.	:	73	:	:	I	ıΩ	ıΩ	01	:	н	:	8	81	es in	fires
Mis	Dwellings.	H	4	3	(1)	9	01	Ŋ	ıΩ	н	:	н	3	33	of fire	Total fires in buildings 121
AND S.	Total.	m	61	н	72	61	н	н	:	ю	8	н	4	25	Number of fires in dwellings Number of fires in business buildings	C
MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	ı	:	H	:	:	:	:	н	:	H	:	4		
ANUFAC	.ssənisud	m	H	н	4	01	H	H	:	8	8	:	4	21	2,518	3,420
In M	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	n in 188	
JING.	Total.	н	I		64	20	:	3	8	01		C)	64	36	ratio	
IN ILLUMINATING.	Other Places.	:	:	H	:	:	:	:	:	:	:	:	:	н	nume	:
TTON	Business,	:		61	:	3	:	:	61	:	:	н	I	6	er er	
I Z	Dwellings.	н	I	:	(1)	(1)	:	3	:	O	3	н	H	10	(as p	
J j	T otal.	ω	61	61	H	н	61	:	:	ıc.	I	61	N	42	strict	
HEATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	in dis	
I HE	Business,	-	H	:	:	:	:	:	:	н	:	н	01	9	lings	al
, Z	Dwellings.	6	Н	8	н	H	8	:	:	+	Ħ	н	m	188	buildings	Total.
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885;) Dwellings. Business.	

Third District-Between Chambers and Houston Streets, West Broadway and South Fifth Avenue, and Crosby, Elm and Centre Streets.

	Total,	\$90,580 oo	149,170 00	185,865 co	90,820 00	87,179 00	1,350 00	290,155 00	20,100 00	33,185 00	44,775 00	25,010 00	154,525 00	#1,172,804 00	ch fire 14
Loss,	Contents.	\$79,355 00	121,645 00	171,515 00	79,050 00	81,824 00	00 000'I	214,590 00	17,330 00	32,300 00	37,000 00	22,535 00	139,550 00	\$997,694 00	splaces to each fi
	.egniblind	\$11,225 00	27,525 00	14,350 00	11,770 00	5,355 00	350 00	75,565 00	2,860 00	885 00	7,775 00	2,475 00	14,975 00	\$175,110 00	Number of dwellings to each fire Number of busine splaces to each fire Number of buildings to each fire
IRES.	Total.	OI	6	11	7	∞	8	91	11	4	7	12	11	108	un N
NUMBER OF FIRES	Other Places,	:	:	:	:	:	:	01	:	:	:	:	:	0	95
MBER	Business.	6	7	6	7	∞	0	13	ω	3	7	11	11	95	of fires in dwellings 11 of fires in business bu'ldings 95 Total fires in buildings 106
NU	Dwellings,	H	64	8	:	:	:	н	3	н	:	н	:	:	bu.ldr
ous.	Total.	∞	co	Ŋ	n	4	8	OI	∞	н	3	∞	9	19	llings ness nildin
M:SCELLANEOUS.	Other Places,	:	:	:	:	:	:	8	:	:	:	:	:	0	dwe busir in bu
SCELI	Business.	7	0	w	3	4	(1)	∞	70	н	3	∞	9	54	es in es in fires
M:s	Dwellings.	н	н	:	:	:	:	. :	c	:	:	:	:	l vo	of fir of fir Total
G AND	Total.	0	N	8	n	4	:	I	н	I	8	73	:	21	Number of fires in dwellings Number of fires in business buildings Total fires in buildings
CTURING	Other Places,	:	:	<i>'</i> :	:	:	:	:	:	:	:	:	:	:	
MANUFACTURING AND OTHER BUSINESS.	Business.	0	8	N	n	4	:	н	н	н	0	2	:	30	1 in 1885)— 333 1,303 1,636
In M	Dwellings.	:	:	н	:	:	:	:	:	:	:	:	:	н	n in 188
ING.	Total.	:	н	:	:	:	:	Ŋ	8	:	:	:	rn -	11	ratio
IN ILLUMINATING.	()ther Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	nume : : :
TTAN	Business.	:	н	:	:	:	:	4	8	:	:	:	n	l oi	Jer el
Iz	Dwellings.	:	:	:	н	:	:	н	:	:	:	:	:	Н .	(as I
ı,	Total.	:	4	8	н.	:	:	:	:	~	8	24	8	1.55	strict
In Heating.	Other Places.	:	:	:	:	_:_	:	:	:	:	:	:	:	:_	in di
HE	Business.	:	3	н	н	:	:	:	:	н	8	н	61	#	lings
1 1	Dwellings.	:	н	ı	:	:	:	:	:	н	:	н	:	4	buildin ngs ss Total
	Months.	January	<b>February</b>	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)  Business  Total

Fourth District-Part of City lying between Chambers and Houston Streets, east of Crosby, Elm and Centre Streets.

		Total.	\$160,255 00	21,353 00	158,151 00	202,096 00	7,367 00	81,072 00	38,579 00	31,832 00	28,964 co	6,282 ∞	56,393 00	27,978 00	\$820,322 00	re : 20 18
			\$16	8	15	203		00	m		Ö		īΩ	8	\$\$ \$\$	ire
	Lo 's.	Contents.	\$129,834 00	18,375 00	121,281 00	153,416 00	5,110 00	55,360 00	29,884 00	24,108 00	20,242 00	00 co6,4	47,208 00	22,580 00	\$632,298 00	ings to each first places to ea
		Buildings.	\$30,421 00	2,978 00	36,870 00	48,680 00	2,257 00	25,712 00	8,695 00	7,724 00	8,722 00	1,382 00	9,185 00	5,398 00	\$188,024 00	Number of dwellings to each fire  Number of business places to each fire  Number of buildings to each fire
	NUMBER OF FIRES.	Total.	59	50	19	29	20	52	93	50	49	49	65	65	705	NZ Z
	OF F	Other Places.	:	н	н	I	:	0	н	I	:	(1	63	:	11	512
	IBER	Business.	81	15	24	91	IO	61	24	14	Ŋ	12	н	OI	182	ngs.
	Nuv	Dwellings.	14	34	36	45	40	31	89	35	44	35	48	55	512	buildi gs
-	US.	Total.	22	23	91	56	15	23	64	32	81	13	30	27	309	ings acss l
۱	MISCELLANEOUS.	Other Places.	:	н	н	н	:	01	н	:	:	:	н	:	7	dwell busi in bu
	CELL	Business.	6	7	9	6	4	6	13	9	64	n	7	8	77	es in es in fires
	Misc	Dwellings.	13	15	6	91	II	12	50	52	91	01	22	25	225	of fires in dwellings 512 of fires in business buildings 182 Total fires in buildings 694
	AND S.	Total.	m	3	II	70	7	OI	7	ro	20	νo	4	4	69	Number of fires in dwellings 512 Number of fires in business buildings 182 Total fires in buildings 694
-	MANUFACTURING OTHER BUSINESS.	Other Places,	:	:	:	:	:	:	:	:	:	н	:	:	I	- 4
	ANUFA THER	Business.	т	ω,	IO	4	Ŋ	∞	9	'n	н	н	8	3	51	38 <sub>5</sub> )— 9,994 2,598 12,592
	In M	Dwellings.	:	:	н	н	8	8	н	:	4		8	H	17	on in 18
	ING.	Total.	14	14	61	61	19	13	22	13	18	25	20	23	219	erati
	In Illuminating.	Other Places.	:	:	_:	:	:	:	:	н	:	:	н	:	0	
H	LLUN	Business.	н	3	9	н	н	н	ın	· ·	н	∞	3	64	35	per e
	Z	Dwellings.	13	11	13	18	18	12	17	6	17	17	91	21	182	t (as
	್ರ	Total.	30	o <b>i</b>	15	12	2	9	:	:	∞	9	11	II	108	istric
I	ATIN	Other Places.	:	:	:	:	:	:	:	:	:	-	:	:	Н .	h ii
	In HEATING.	-Business.	٧٢	8	8	8	:	H	:	:	H	:	3	co	19	dings
1	ï	Dwellings.	15	∞	13	IO	6	25	:	:	1	ın	∞	∞	88	buildin ngs ss
		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Totai	Number of buildings in district (as per enumeration in 188s)—  Dwellings  Business. 2,5  Total

Fifth District—Part of City lying between Houston and Twenky-third Streets.

		.latoT	\$131,337 00	16,645 00	37,155 ∞	16,133 00	49,152 00	38,970 00	125,890 00	11,530 00	3,540 00	7,445 00	21,975 ∞	36,335 00	\$495,037 00	re 46 ch fire 20
	Loss.	Conterts,	\$116,596 oo	12,740 00	30,625 00	11,728 00	42,537 00	26,375 00	112,495 00	00 064.6	2,286 00	5,275 00	15,350 00	31,785 00	\$417,582 00	Number of dwellings to each fire  Number of business places to each fire  Number of buildings to each fire
		.egnibling	\$14,741 00	3,905 00	6,530 00	4,405 00	6,615 00	12,595 00	13,395 00	1,740 00	1,754 00	2,170 00	6,525 00	4,550 00	\$78,425 00	mber of dwell mber of busine nber of build
	NUMBER OF FIRES.	Total.	84	39	51	46	49	48	64	35	38	40	40	23	551	ZZ Z
	OF ]	Other Places.	:	:	03	:	H	:	:	H	:	н	N	н	00	350 193
	IBER	Business.	91	13	20	15	14	21	23	14	∞	91	14	61	193	. S
	NUN	Dwellings.	32	92	59	31	34	27	4 I	20	30	23	24	33	350	of fires in dwellings
	US.	Total.	14	27	17	15	81	24	40	21	17	11	91	91	221	ings ess br
1015	ANEO	Other Places,	:	:	н	:	н	:	:	:	:	:	н	:	m	dwell ousin in bu
	Miscellaneous.	Business.	20	4	7	7	ıΩ	10	17	∞	72	n	ю	9	8	s in se in l
100	Mıs	Dwellings.	6	∞	6	00	12	14	23	13	12	00	12	10	138	of fire
S crances	S. AND	Total.	70	н	9	Ŋ	4	∞	9	9	8	4	9	4	57	Number of fires in dwellings 350 Number of fires in business buildings. 193 Total fires in buildings 543
Sanda	TURING	Other Places,	:	:	:	:	:	:	:	:	:	:	:	:	:	
Cano G	MANUFACTURING AND OTHER BUSINESS.	Business.	4	н	9	Ŋ	4	7	70	ıν	I	4	9	4	52	1885)— 15,986 3,836 19,822
fa am t	In M O	Dwellings.	н	:	:	:	:	н	н	H	н	:	:	:	ער	81 ui uc
- 8	ING.	Total.	91	11	14	14	91	6	18	œ	12	18	6	15	160	eratio
and make	In Illuminating.	Other Places.	:	:	н	:	:	:	:	I	:	н	:	:	m	un iii
2	LLUM	Business.	3	н	c	8	n	n	н	H	8	∞	3	3	33	per e
16.	In	Dwellings,	13	OI	OI	12	13	9	17	9	IO	6	9	12	124	t (as
	rå.	Total.	13	15	14	12	II	7	:	:	7	7	6	∞ 2	113	istric
ı	ATING	Other Places.	:	:	:	:	:	:	:	:	:	:	I	н	0	b in d
1	In HEATING.	Business.	4	7	4	н	01	н	:	:	:	I	S, e	9	233	oer of buildings in district (as Dwellings Business Total
İ	Ä	Dwellings.	6	∞	OI	II	6	9	:	:	7	9	9	11	83	f buil Ilings ness.
		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings  Business  Total

Sixth District .- Purt of City lying between Twenty-third and Fifty-ninth Streets.

		.lstoT	\$70,142 00	6,367 00	14,125 00	26,276 00	736,400 00	12,920 00	348,435 00	2,380 00	25,200 00	42,175 ∞	24,226 00	52,682 00	£1,361,328 oo	55	. 45
					н						~					re	re
	Loss.	Conten s.	\$47,869 00	5,190 00	10,847 00	15,456 00	372,588 00	8,990 00	330,160 00	1,530 00	13,960 00	29,960 00	16,842 00	36,322 00	\$889,714 00	gs to each fi	gs to each fi
		-sgnibling	\$22,273 00	1,177 00	3,278 00	10,820 00	363,812 00	3,930 00	18,275 00	850 00	11,240 00	2,215 00	7,384 00	16,360 00	\$471,614 co	Number of dwellings to each fire Number of business places to each fire	Number of buildings to each fire
	IRES.	Total.	54	33	55	62	43	45	77	33	47	48	46	99	603	Num	Num
	NUMBER OF FIRES.	Other Places.	:	-	н	н	:	:	01	н	н	:	:	63	6	186	594
,	IBER	Business.	91	∞	1.51	61	15	91	28	OI	61	13	6	81	186	gs. 1	
	Now	Dwellings.	38	24	39	42	28	59	47	22	27	35	37	04	408	ildin	Total fires in buildings
	us.	Total.	14	12	61	61	II	12	26	15	17	15	14	15	219	ings ss bu	ilding
	MISCELLANEOUS.	Other Places.	:	:	н	:	:	:	01	:	:	:	:	н	4	lwell	in bu
	CELL	Business.	4	8	61	W)	7	4	22	ю	ນດ	4	н	Ŋ	64	s in s	fires
	Mis	Dwellings.	lo	OJ	91	14	4	∞	32	12	12	I,	13	6	151	f fire	otal
	AND S.	Total.	∞	3	7	12	3	∞	3	4	OI	9	3	Ŋ	72	Number of fires in dwellingsNumber of fires in business buildings.	I
,	TURING	Other Places.	:	:	:	:	:	:	:	н	:	:	:	н	6		
	MANUFACTURING AND OTHER BUSINESS.	Business.	9	3	9	II	3	∞	33		6	8	3	m	Ę,	1885)— 22,274 4,585	26,859
,	Iz	Dwellings.	2	:	H	н	:	:	:	:	н	3	:	н	6	n in 18	
1	JING.	Total.	16	6	14	12	19	13	81	14	9 <b>1</b>	15	20	20	186	ratio	
	In Illuminating.	Other Places.	:	н	:	:	:	:	:	:	н	:	:	:	64	nume	:
1	LLUN	Business.	3	I	4	3	2	4	3	4	4	9	3	9	46	oer e	
	INI	Dwellings.	13	7	OI	6	14	6	15	OI	II	6	17	14	138	t (as 1	
	ij	Total.	16	6	15	61	OI	12	:	:	4	12	6	80	126	istric	
	In Heating.	Other Places.	:	:	:	н	:	:	:	:	:	:	:	:	н	p u, s	d
	HE.	Business.	3	Ci	3	:	:	:	:	:	н	:	0	4	15	dings igs	Total.
	í	Dwellings.	13	۲~	12	18	OI	12	:	:	m	12	7	91	IIC	r of building Dwellings . Business	
-		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings. 22,2  Business. 4,5	

Seventh District—Fart of City lying between Fifty-minth and One Hundred and Tenth Streets, west of Fifth Avenue.

	Total.		\$107 00	855 00	34,075 00	16,570 00	3,800 00	58 00	1,305 00	u5 00	IO 00	95 00	550 co	\$57,440 00	ch fire 128
Loss.	Contents.		00 03\$	485 00	8,255 00	15,010 00	3,000 00	43 00	800 00		:	20 00	450 00	\$28,173 00	Number of dwellings to each fire
	Buildings.		\$27 00	370 00	25,820 00	00 095'1	800 00	15 00	505 00	15 co	10 00	45 00	100 00	\$29,267 00	nber of dwelli nber of busine nber of buildi
NUMBER OF FIRES.	Total.	N	Ø	4	9	10	ю	00	4	8	3	Ŋ	3	47	N Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
OF I	Other Places.	:	:	н	63	H	:	н	:	н	H	н	:	00	38 8 39
IBER	Business.	:	н	:	:	I	н	3	:	:	н	:	н	∞	: so :
No Z	Dwellings.	63	н	3	4	3	63	4	4	н	H	4	01	31	ildin.
us.	Total.	:	:	н	н	н	н	7	4	н	H	3	63	33	of fires in dwellings of fires in business balldings.  Total fires in buildings
MISCELLANEOUS.	Other Places.	:	;	н	:	I	:	н	:	н	H	н	:	9	dwel usine in bu
CELL	Business.	:	:	:	-:	:	:	'n	:	:	:	:	н	4	es in s in b fires
Mis	Dwellings.	:	:	:	н	:	н	3	4	:	:	8	н	12	of fire of fire otal
AND SS.	Total.	:	:	:	н	н	н	н	:	:	:	:	:	4	Number of fires in dwellings Number of fires in business baildings. Total fires in buildings
TURING	Other Places.	:	:	:	-	:	:	:	:	:	:	:	:	I	
MANUFACTURING AND OTHER BUSINESS.	Business.	:	:	:	:	н	н	:	:	:	:	:	:	0	. 2,493 . 1,021 . 3,514
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ING.	Total.	н	c۱	:	63	н	:	_:	:	:	н	н	н	6	erati
In Illuminating.	Other Place.	:	:	:	:	:	:	:	:	:	:	:	:	1:	unu:
TLUN	Business.	:	н	:	:	:	:	:	:	:	H	:	:	01	per 6
I Z	Dwellings.	H	н	:	61	I	:	:	:	:	:	I	н	7	t (as
, i	Total.	H	:	t;	8	63	н	:	:	н	H	н	:	12	stric
ATING	Other Places.	:	:	:	н	:	: -	:	:	:	:	:		"	in d
In Heating.	Business.	:	:	:	:	:	:	:	:	:	:	:	:	:	ber of buildings Dwellings Business
N Z	Dwellings.	н	:	.rc	ы	8	н	:	:	н	н	7	:	11	ber of build Dwellings Business
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1883)—  Dwellings  A46  Business  Total  3,53,5

Eighth District - Part of City lying between Fifty-minth and One Hundred and Tenth Streets, east of Fifth Avenue.

	.IstoT	\$5,577 00	00 065,6	1,727 00	6,288 00	1,087 00	1,850 00	10,075 00	1,245 00	1,747 00	1,270 00	4,539 00	1,820 00	\$46,815 00	re 55 ch fire 27
Loss.	Contents.	\$3,877 00	5,315 00	837 00	5,403 00	652 00	1,125 00	6,555 00	875 00	1,280 00	635 00	4,037 00	00 086	\$31,581 oo	ngs to each fiss places to ea
	Buildings.	\$1,700 00	4,275 00	890 00	885 00	425 00	725 00	3,520 00	370 00	467 00	635 00	502 00	840 00	\$15,234 00	Number of dwellings to each fire Number of business places to each fire Number of buildings to each fire
RES.	Total.	25	24	12	11	20	91	36	81	13	21	20	21	237	ZZ Z
F F1	Other Places.	:	:	н	:	Ø	63	(1)	:	:	:	-	:	00	175 54 229
SER C	Business.	9	7	Q	co	n	9	7	3	61	∞	4	3	54	
NUMBER OF FIRES	Dwellings.	19	17	6	00	15	00	27	15	II	13	H.5	81	175	of fires in dwellings 175 of fires in business buildings. 54  Total fires in buildings 229
us.	.lstoT	ın	∞	22	33	10	9	31	II	7	7	II	6	113	ings sss bu
ANEO	Other Places.	:	:	:	:	O)	N	(1)	:	:	:	н	:	7	dwell usine
MISCELLANEOUS.	Business.	н	3	н	01	:	8	7	н	:	4	:	- 01	23	s in t
Mis	Dwellirgs.	4	70	+	н	∞	64	22	10	7	33	01	7	83	f fire f fire otal
AND S.	Total.	н	m	н	н	Q	4	н	:	н	01	4	н	2.5	Number of fires in dwellings Number of fires in business buildings.  Total fires in buildings
TURING	Other Places.	:	:	;	:	:	:	:	:	:	:	:	:	:	
MANUFACTURING AND OTHER BUSINESS.	Business.	-	n	:	ı	81	33	:	:	×ŧ	н	61	:	±	1885)— 9,689 1,454
Z Z	Dwellings.	:	:	н	:	:	н	н	:	:	H	01	н	7	ı in 188
In Illuminating.	Total.	1.1	1.1	61	4	4	2	4	7	4	II	c	7	73	ration
IINAT	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ume
ורדת	Business.	н	-	н	:	I	н	:	01	1	co	н	н	13	er en
Z	Dwellings.	IO	OI	н	4	n	4	4	N	n	∞	01	9	99	(as b
· i	Total,	∞	CV	4	co	4	н	:	:	н	н	01	4	30	strict
ATIN	Other Places.	:	:	I	:	:	:	:	:	:	:	:	:	н	in di
In HEATING.	Business.	3	:	:	:	:	:	:	:	:	:	н	:	4	uildings 35
1	Dwellings.	5	Ø	3	3	4	н	:	:	н	н	-	4	25	buildings.
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings Business.  Total

Ninth District—Part of Cive lying between One Hundred and Teuth Street and Harlem River, west of Eighth Avenue.

	Total.	\$95 00	1,875 00	1,015 00	999	485 00	265 со	287 00	595 00	1,000 co	5,800 00	325 00	325 00	12,7:2 00	66 re 111
NEOUS. NUMBER OF FIRES. Loss.	Contents.	\$20 00	465 00	10 00	430 со	00 09		85 00	145 00	200 00	3,500 00	:	:	\$5,215 00	Number of dwellings to each fire 66 Number of business places to each fire 111
	Buildings.	\$75 00	1,410 00	1,005 00	235 00	425 00	265 00	202 00	450 00	200 00	2,300 00	325 00	325 00	\$7,517 00	ber of dwelling ber of business
FIRES.	Total.		3	Ŋ	9	4	8	9	20	4	n	9	ıν	52	Num
F F1	Other Places.	:	:	н	н	4	:	:	н	н	н	m	н	OI	14
BER O	Business.	:	:	н	63	н	:	S	61	63	н	:	:	14	
NUMBER OF	Dwellings.	<u>س</u>	3	n	e.	01	8	н	61	н	н	n	4	138	lilding
US.	Total,	:	н	:	:	N	:	9	:	I	0	N	н	15	lings.
MISCELLANEOUS.	Other Places.	:	:	:	:	:	:	:	:	н	1	н	:	m	dwel
CELL	Business.	:	:	:	:	н	:	ν.	:	:	н	:	:	~	es in s in b
Mis	Dwellings.	1:	н	:	:	н	:	н	:	:	:	н	н	l v	of fire
AND	Total.	:	н	N	н	I	:	:	4	:	:	8	8	13	Number of fires in dwellings Number of fires in business buildings.
URING	Other Places.	:	:	-	н	н	:	:	H	:	:	8	н	7	
IN MANUFACTURING AND OTHER BUSINESS.	Business.	:	:	:	:	:	:	:	8	:	:	:	:	0	1885)—
In Ma	Dwellings.	:	н	н	:	:	:	:	н	:	:	:	н	4	n in 188
NG.	LatoT	8	:	N	rV.	:	н	:	н	61	I	:	н	15	ration
IN ILLUMINATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	nume
LLUM	Business.	:	:	н	61	:	:	:	:	8	:	:	:	100	per e
Iz	Dwellings.	1 8	:	н	3	:	н	:	н	:	н	:	н	Oi I	t (as )
1	Total.	I	н	н	:	I	н	:	:	н	:	81	н	6	istric
ATING	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	in di
In HEATING.	Business.	:	:	:	:	:	:	:	:	:	:	:	:	:	dings
Z	Dwellings.	н	H	н	:	н	н	:	:	H	:	Ci	H	6	f buil ings
IN HEATING. IN ILLUMINATING. IN MANUFACTURING AND MISCELLAN.	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings 1,88 Business . ref

Total fires in buildings..... 42 | Number of buildings to each fire.... 8

Total..... 3,422

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	Total.	\$10,915 00	2,560 00	844 00	290 00	194,476 00	3,562 00	1,451 co	362 00	45 00	93 00	1,157 00	27,649 00	\$243,404 00	65 fire 22
Loss.	Contents,	\$10,383 oo	1,635 00	317 00	213 00	00 968,891	2,622 00	1,231 00	127 00	30 00	26 00	655 00	15,447 00	\$198,637 00 \$	Number of dwellings to each fire Number of business places to each fire
	Buildings.	#532 00	925 00	527 00	72 00	28,580 00	940 co	220 00	235 00	15 00	17 co	502 00	12 202 00	\$44,767 00	ber of dweilin
RES.	Total.	25	6	12	12	91	13	21	9	4	- 6	13	2	156	Num
F FII	Other Places.	:	:	:	:	:	н	8	81	:	н	:	:		L 2 1
SER O	Business.	4	01	73	7	9	7	7	3	:	н	н	7.0	54	107 gs 42
NUMBER OF FIRES.	D.vellings.	16	7	IO	∞ .	10	22	H	н	4	7	12	91	107	of fires in dwellings 107 of fires in business buildings 42
us.	Total.	00	7	72	01	7	9	15	н	н	m	Ø	6	99	ings.
Miscellaneous.	Other Places.	:	:	:	:	:	:	01	:	:	н	:	:	m	lwell
CELL	Business.	1 0	64	н	н	01	r)	Ŋ	:	:	:	:	6	- 61	s in s
Mis	Dwellings.	9	Ŋ	4	н	72	co	∞	н	н	8	04	9	1 ++	f fire
AND	Total.	0	:	:	01	N	ĸ	r	20	:	:	н	64	50	Number of fires in dwellings Number of fires in business buildings
FURING	Other Places.	:	:	:	:	:	н	н	N	:	:	:	:	4	ZZ
MANUFACTURING AND OTHER BUSINESS.	Business.	0	:	:	н	8	N	Ø	m	:	:	I	:	13	1885)— 6,941
In M.	Dwellings.	:	:	:		:	:	:	:	:	:	:	C)	3	n in 188
ING.	Total.	4	н	4	3	7	6	co	:	3	4	7	9	45	ratio
IINAT	Other Places.	1:	:	:	:	:	:	:	:	:	:	:	:	:	nume
IN ILLUMINATING.	Business.	:	:	:	н	01	73	:	:	:	н	:	N	∞	ber el
IN	Dwellings.	4	H	4	(1	5	н	n	:	n	co	7	4	37	t (as 1
15	Total.	9	н	3	5	:	н	:	:	:	01	33	4	25	ouildings in district
ATING	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	in di
In HEATING.	Business.	:	:	-	н	:	:	:	:	:	:	:	:	61	dings
I	Dweilings.	٥.	н	01	4	:	н	:	:	:	(1)	3	4	23	build ngs.
	Months.	January	February	March	April	May	June	July	August:	September .	October	November	December	Total	Number of buildings in district (as per enumeration in 1883)— 6,9 Business.

Eleventh District—Part of City lying between Harlem and East Rivers, Kingsbridge Road, etc., and Bronx River.

		Total.	\$725 00		12,615 00	792 co	6,230 00	210 00	4,647 00	2,554 00	00 096	201 00	1,750 00	00 486	\$31,671 00	re 155 ch fire 138
	Loss.	Contents.	\$345 00	:	10,625 00	455 00	1,575 00	115 00	2,515 00	1,018 00	550 00	00 26	00 089	665 00	\$18,638 oo	ngs to each fi
		Buildings.	\$380 00	:	oo o66,1	337 00	4,655 00	95 00	2,132 00	1,536 00	410 00	00 901	co o/o,1	322 00	\$13,033 00	Number of dwellings to each fire 155 Number of business places to each fire 138  Number of buildings to each fire 150
	NUMBER OF FIRES.	.lstoT	9	н	7	00	4	4	13	9	9	∞	OI	9	52	ZZ Z
0	OF ]	Other Places.	:	:	:	H	:	H	H	:	4	3	н	:	11	23 23 68
	MBER	Business,	I	:	Ŋ	61	Н	01	4	н	н	3	:	co	23	ngs.
,	NU	Dwellings.	10	н	Ø	ıΩ	3	H	∞	70	н	01	6	co	45	of fires in dwellings of fires in business buildings. Total fires in buildings
	us.	Total.	"	:	4	8	H	8	11	4	3	ю	3	9	40	lings ress b
	MISCELLANEOUS.	Other Places.	:	:	:	-	:	I	н	:	3	н	:	:	7	dwel busir
	CELL	Business.	:	:	3	:	:	H	N	н	:	I	:	n	H	es in es in fires
Ĭ	Mis	Dwellings.	н	:	H	H	H	:	∞	3	:	H	m	n	22	of fir of fir Fotal
	3 AND	Total.	н	:	:	н	н	н	81	:	81	3	I	:	12	Number of fires in dwellings Number of fires in business buildings. Total fires in buildings
	TURING	Other Places.	:	:	:	:	:	:	:	:	H	H	H	:	. ന	
	In Manufacturing and Other Business.	Business.	п	:	:	н	I	н	61	:	H	81	:	:	6	n in 1885)— 6,989 3,184
)	In M O	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	3r ni no
	ING.	LetoT	:	:	:	н	н	н	:	01	н	:	н	:	7	erati
	In Illuminating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	enu m
,	LLUN	Business.	:	:	:	:	:	:	:	:	:	:	:	:	:	per e
Į.	In	Dwellings.	:	:	:	н	н	4	:	01	H	:	н	:	7	t (as
	15	Total.	4	н	3	4	н	:	:	:	:	М	S	:	20	istric
H	ATING	Other Places.	:	:	:	:	:	:	:	:	:	H	:	:	н	ii d
	In HEATING.	Business.	:	:	N	н	:	:	:	:	:	:	:	:	0.0	uildings
	In	Dwellings.	4	H	н	n	H	:	:	:	:	н	N	:	16	f buil ings. ess
		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  6.9  Business 3,1  Total 10,1

		\$3,000 00	00 009,1	00 000,1	1,150 00	200 00	40 00	25 00	:	∞ ∞9,1	75 00	:	650 00	40 00	105
	Total.	\$3,0	1,60	ν,ι	1,1	7	,	4,225	:	1,60		:	9	\$14,040 00	ire
Loss.	Contents,	\$1,500 00	800 00	00 001	150 00	300 00	5 00	2,500 00	:	1,000 00	50 00	:	150 00	\$7,155 00	ngs to each f ss places to ea
	Buildings.	\$1,500 00	800 00	300 00	I,000 00	400 00	35 00	1,725 00		000 000	25 00	:	200 00	\$6,685 00	Number of dwellings to each fire 105 Number of business places to each fire
IRES.	Total.	н	0	H	н	н	8	4	:	н	н	н	01	17	Zum
NUMBER OF FIRES.	Other Places.	:	:	:	:		:	:	:	:	:	н	н	1 0	0,0
1BER	Business.	н	0	н	:	:	:	:	:	-	:	:	н	9	ngs.
Z Z	Dwellings.	:	:	:	н	н	8	4	:	:	×	:	:	6	mildin
ous.	Total.	H	×	:	н	I	:	3	:	H	н	:	:	6	llings tess b
Miscellaneous.	Other Places.	:	:	:	:_	:	:	:	:	:	:	:	:	:	dwe
SCELI	Business.	H	н	:	:	:	:	:	:	н	:	:	:	3	res in
1	Dwellings.	:	:	:	н	H	:	m	:	:	H	:	:	9	of fi
3 AND	Total.	:	:	:-	:	:	:	:	:	:	:	I	:	ı	Number of fires in dwellings Number of fires in business buildings.
CTURING	Other Places,	:	:	:	:	:	:	:	:	:	:	I	:	н .	il
Manufacturing and Other Business.	.esənieud	:	:	:	:	:	:	:	:	:	:	:	:	:	35)— . 945 . 674
I <sub>N</sub>	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	n in 188
ING.	Total.	1:	:	н	:	:	н	н	:	:	:	:	:	3	ratio
In Illuminating.	Other Places.	:	:	:	:	:	:	:	:	:	:	1:	:	:	l an
LILUM	Business.	:	:	н	:	:	:	:	:	:	:	:	:	н	per e
In I	Dwellings.	:	:	:	:	:	н	н	:	:	:	:	:	10	t (as
J.	Total.	:	н	:	:	:	I	:	:	:	:	:	N	4	listric
In Heating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	н	н	s in d
HE HE	Business.	:	I	:	:	:	:	:	:	:	:	:	н	0	lding
l i	Dwellings.	·:	:	:	:	:	н	:	_:	:	:	:	:	н	f bui
	Months.	January	February	March	April	May	June	July	August	September .	October	November .	December	Total	Number of buildings in district (as per enumeration in 1885)— Dwellings Business

Total fires in buildings. .... 15 Number of buildings to each fire .... 101

Total..... 1,619

Thirteenth District-Governor's, Bedioe's, Ellis', Blackwell's, Ward's, Randall's and North Brother Islands.

	LefoT			\$2 00	:		:	:	:	:	:	:	I 00	#3 00	re 219
Loss.	Contents,		:	:	:	:	:	:	:	:	:	:	:		ngs to each fi
	Buildings.	:	:	\$2 00	:	:	:	:	:	:	:	:	8 11	\$3 00	Number of dwellings to each fire 219 Number of business places to each fire 231
NUMBER OF FIRES.	.lstoT	:	:	н	:	:	:	:	:	:	:	:	н	0	Num
OF I	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	++
MBER	Business.	:	:	н	:	:	:	:	:	:	:	:	:	H	ıgs.
Non	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	н	H	uildin
us.	Total.	:	:	:	:	:	:	:	:	:	:	:	:	:	llings ress b
MISCELLANEOUS.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	dwel
CELL	Business.	1:	:	:	:	:	:	:	:	:	:	:	:	:	es in
Mrs	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	of fire
G AND	Total.	:	:	:	:	:	:	:	:	:	:	:	:		Number of fires in dwellings Number of fires in business buildings.
IN MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:		
ANUFAC THER I	Business.	:	:	:	:	:	:	:	:	:	:	:	:	:	85)— 219 231
In M	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:		nber of buildings in district (as per enumeration in 188 Dwellings. Business
ING.	Total.	:	:	-	:	:	:	:	:	:	1:	:	:	н	eratio
In Illuminating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	<u> </u> :	nume
LLUM	Business.	:	:	H	:	:	:	:	:	:	:	:	:	H	per e
I z	Dwellings.	<u>                                      </u>	:	:	:	:	:	:	:	:	:	:	:	1:	t (as
ú	Total.	:	:	:	:	:	:	:	:	:	:	:	н	H	stric
In Heating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	in di
4 HE	Business.	:	:	:	:	:	:	:	:	:	:	:	:	:	dings
I,	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	H	н	buil ngsss
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885).  Business.

Total fires in buildings..... 2 Number of buildings to each fire..... 225

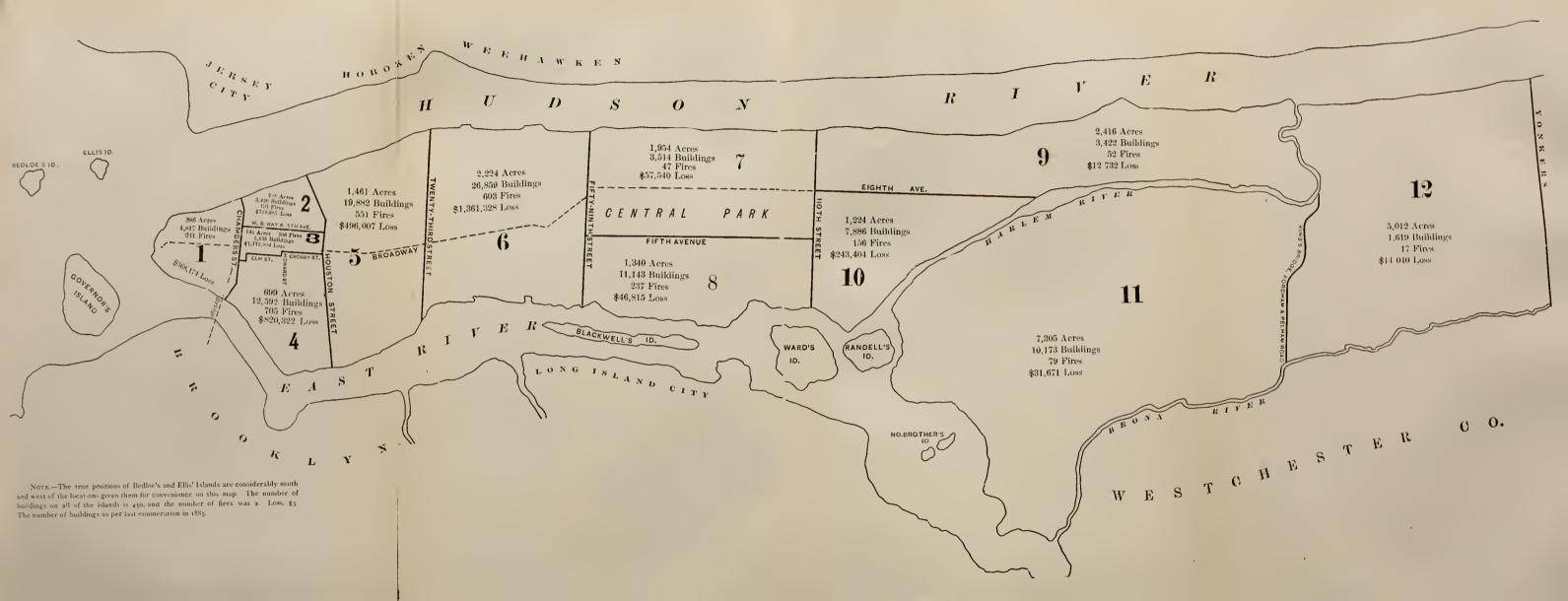
Total..... 450

	Total.	26	26	19	300	221	219	22	113	15	99	40	6	:	1,228
ANEOUS.	Other Places.	6	70	61	7	3	4	9	7	က	m	7	:	:	56
MISCELLANEOUS.	Business.	81	81	54	77	98	64	4	23	7	r9	11	33	:	44I
	Dwellings.	7	33	'n	225	138	151	12	83	າດ	44	22	9	:	731
QN	Total.	9	25	21	69	57	72	4	21	13	30	12	н	:	375
TURING A	Other Places,	6	4	:	н	:	81	н	:	7	4	3	н	:	56
IN MANUFACTURING AND OTHER BUSINESS,	Business.	56	21	50	51	52	19	N	14	N	13	6	:	:	301
ZI	Dwellings.	н	:	н	17	ıΩ	6	H	7	4	3	:	:	:	48
,	Total.	47	9#	11	219	160	98I	6	73	15	45	7	3	ı	802
INATING.	Other Places.	4	н	:	01	ĸ	61	:	:	:	:	:	:	:	12
In Illuminating.	Business.	34	6	OI	35	33	46	8	13	ທ	∞	:	ı	н	761
	Dwellings.	6	91	н	182	124	138	7	99	OI.	37	7	61	:	593
	Total.	37	24	15	801	113	126	12	30	6	25	20	4	н	524
ATING.	Other Places.	0	:	:	н	61	I	н	н	:	:	н	н	:	oi
IN HEATING.	Business.	21	9	11	61	58	15	:	4	:	Ø	ю	C)	:	111
	Dwellings.	14	81	4	88	83	011	II	35	6	23	16	н	н	403
	DISTRICTS.			Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Total

0	
4	
~	

	Total.	\$568,174 00	759,885 00	1,172,804 00	820,322 00	496,007 00	1,361,328 00	57,540 00	46,815 00	12,732 00	243,404 00	31,671 00	14,040 00	3 00	\$5,584,625 00
Loss.	Contents.	<b>\$443,332 00</b>	513,510 00	997,694 00	632,298 00	417,582 00	889,714 00	28,173 00	31,581 00	5,215 00	198,637 00	18,638 00	7,155 00		\$4,183,529 00
	Buildings	\$124,842 00	246,375 00	175,110 00	188,024 00	78,425 00	471,614 00	29,267 00	15,234 co	7,517 00	44,757 00	13,033 00	6,885 00	3 00	\$1,401,096 00
SER OF TH FIRE.	Total.	22	28	15	18	37	45	80	49	82	53	150	IOI	225	34
AVERAGE NUMBER OF BULDINGS TO EACH FIRE.	Business, etc.	20	17	14	14	20	25	128	27	111	22	138	112	231	25
AVERA	Dwellings.	33	37	30	20	46	55	80	55	, 99	65	155	105	219	46
DINGS N IN 1885).	Total.	4,817	3,420	1,636	12,592	19.822	26,859	3,514	11,143	3,422	7,886	10,173	619,1	450	107,353
NUMBER OF BULDINGS (AS PER ENUMERATION IN 1885).	Business, etc.	3,805	206	1,303	2,598	3,836	4,585	1,021	1,454	1,560	945	3,184	674	231	26,098
NUMBI (AS PER ED	Dwellings.	1,013	2,518	333	9,994	15,986	22,274	2,493	689,6	1,862	6,941	6,989	945	219	81,255
	Total.	241	131	108	705	551	603	47	237	52	156	79	17	8	2,929
F FIRES	Other Places.	18	OI	8	II	∞	6	∞	∞	ıo	7	11	8	:	104
NUMBER OF FIRES.	Business.	192	54	95	182	193	186	∞	54	14	42	23	9	н	1,050
Z	Dwellings.	31	29	II	512	350	408	31	175	200	107	45	6	н	1,775
	DISTRICTS.	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Total





Indictments and Convictions for Arson, Incendiarism, etc.

SENTENCE	AND REMARKS.	Three months in Penitentiary.	Three years, three months, State Prison.	Ten years, State Prison.	Eight years, State Prison.	Seven years, six months, Peni- tentiary.	Ten years, State Prison.	Sixteen years, State Prison.	Bailed 1n \$2,500.
WHEN AND OF	WHAT CONVICTED.	January 10, ma- licious mis- chief	April 26, at- tempt at ar- son, third de- gree	April 14, arson, second degree	May 18, arson, second degree	July 11, arson, Second degree	October 8, ar- son, second degree	October 24, ar- son, first de- gree	December 16, jury disagreed
NATURE OF	INDICTMENT AND DATE.		March 1, arson, first degree	March 1, arson, first degree	April 28, 1886, arson, second degree	June 15, arson, first degree	September 14, arson, first degree	September 30, arson, first degree	November 17, arson, first degree
NATURE OF CHARGE AND	CIRCUMSTANCES.	Threw hot coals on a bed at No. 167 Chrystie street	Setting fire to his store, No. 682 Tenth avenue, February 25	Setting fire to his residence, No. 323 East Forty-eighth street,	Setting fire to residence and store, No. 528 West Thirty-ninth street, March 25, 1886	Setting fire to No. 217 East Twenty-sixth street, June 8, 8.04 P. M	Setting fire to No. 1958 Third avenue, September 4, 7.28 P. M.	Setting fire to No. 419 West Fifty-sixth street, August 4, 3 A. M	Setting fire to No. 417 Fifth street, November 6, 6 A. M.
	Occupation.	German Cabinet-maker.	Jeweler	Coachman	Grocer	Housekeeper {	Clerk	Shoemaker	German Housekeeper
Person.	Nativity.		Irish Jeweler	3	;	*	United States Clerk	Poland	German
ION OF	Color.	White	*	;	*	:	;	*	:
DESCRIPTION OF PERSON.	Sex.	Male White	:	:	•	Female	Male	:	Female
Н	Age	45	83	62	04	54	32	04	04
	Name.	John Hilderbrant 45	Percy W. Sullivan 23	Charles McDonough	John M:Grath	Honora Green,	George R. Burdge	Simon Schwartzman 40	Lizzie Weispfening.

	AND REMARKS.	Indictment untried, bailed in \$1,000.	Discharged on her own recognizance; evidence insufficient.	Raber disappeared night of November 29; not been seen since.	May 10, sent to	October 6, de- clared insane by jury and sent to Lunatic Asylum	October 6, de- clared insane and sent to Lunatic Asylum
WHEN AND OF	WHAT CONVICTED.						
NATURE OF	DATE.	September 14, arson, second degree:	October 5, ar- son, first de- gree	December 16, arson, first degree	May 9, held for examination as to sanity	August 5, held for examination as to santity	October 3, held for examination as to san-ity
NATURE OF CHARGE AND	CIRCUMSTANCES.	Setting fire to No. 7 Frankfort street, Aug. ust 4, 4 P. M	Setting fire to No. 136 West Thirty-third street, September 12, 2.30 A. M	Setting fire to No. 603 East Ninth street, No- vember 29, 12.23 A. M.	Setting fire to No. 840 Second avenue, April 29, and other days	Setting fire to steamship "Queen," at Pier 29, North river, August 3	Setting fire to No. 20x East Eighty-fifth street, September 9
	Occupation.	Printer	Housekeeper	Wine merchant.	None	Inventor	Painter
PERSON.	Nativity.	United States. Printer	*	German	United States None	Irish Inventor	United States Painter
ON OF	Color.	White.	:	*	3	ä	;
DESCRIPTION OF PERSON	Age Sex. Color.	Male	Female	Male	Female	Male	:
Q	Age	81	47	74	15		45
	Name.	William Purbs	Annie Berry	Peter Faber	Katie Fischer 15 Female	Thomas J. Mooney. 40	Richard Handley 45

#### BUREAU OF COMBUSTIBLES.

## Operations under the Laws Regulating the Storage of Combustibles and Explosive Materials, etc.

	ن		d of.			Dispo	SITION			
Complaints of Violations, etc.	Pending last Report.	Received since.	Total to be Disposed	Complied on Notice.	Unfounded.	Penalties Collected.	Penalties Remitted,	Prosecution Recommended.	Total.	Now Pending.
Selling kerosene-oil below test	ı	ı	2				2		2	
Selling kerosene-oil without license.		74	74		ı			73	74	
Chimney fires	34	224	258			57	181	4	242	16
Hoistways found open after con-	9	19	28		ı	3	16	4	24	4
Fire-hydrants obstructed		11	11	10					10	ı
Lights unprotected		12	12	3					3	9
Want of fire-extinguishing appliances	5	ı	6		ı				r	5
Combustible material in excessive a		31	31	18	8			ı	27	4
Kerosene or naphtha, etc., in ex-		22	22	13	6				19	3
Fireworks, chemicals, matches, etc, kept without permit	1	10	10.		5			5	10	
Powder, etc., improperly stored, (	\	5	5	5					5	
Chimneys, flues, heating appara-	2	126	128	43	14				57	71
Ashes in wooden boxes, etc		1	1	ı					1	
vegetable fibre stored in excessive quantity	••	3	3	2	1				3	
Total	51	540	591	95	37	60	199	87	478	113

Special surveys made to determine the fitness of	
premises for the storage of combustibles or ex-	
plosive materials	1,018
Samples of kerosene-oil collected and tested	10,683
Samples of kerosene-oil collected and tested from	
supposed lamp explosions	17
Special surveys of explosives at shafts of New	
Aqueduct	20

# Money Received for Licenses and Permits Issued, Penalties Collected, Sale of Explosives, etc.

For 3,950 kerosene-oil licenses issued, at \$10	\$39,500	00
For 82 powder licenses issued, at \$2	164	00
For 534 special permits issued, at \$2	1,068	00
For 32 wholesale fireworks permits issued, at \$2.	64	00
For 21 retail fireworks permits issued, at \$1	21	00
For 92 retail fireworks permits issued, at 50 cents	46	00
For 1,987 retail fireworks permits issued, at 25 cents	496	75
For 131 kindling fire in street permits issued, at		
50 cents	65	50
Total for licenses and permits	\$41,425	25
For 57 penalties for chimney fires, at \$5 \$285 00		
For 3 hoistways left open, at \$50 150 00		
Total for penalties	435	00
Total received and turned over to the Relief Fund	\$41,860	25

BUREAU OF INSPECTION OF BUILDINGS.

Plans and Specifications for New Buildings Filed and

Plans and Specifications for New Buildings Filed and Acted upon.

Classification.	Pending last Report.	Received since.	Fotal.	Approved.	Amended and Approved.	Disapproved.	Now Pending.	Total.	Estimated Cost.
Dwelling-houses—Estimated }		18	18	3	5	10		18	\$1,175,000 00
Dwelling-houses—Estimated cost between \$20,000 and		258	258	52	190	14	2	258	6,333,000 00
550,000		895	895	244	552	99		895	10,794,600 00
Flats—Estimated cost over	2	1,492	1,494	481	831	180	2	1,494	30,357,000 00
Tenement-houses—Estimated cost less than \$15,000		346	346	119	148	79		346	4,425,700 00
Hotels and boarding-houses		2	2	ı	ı			2	14,000 00
Sures—Estimated cost over		25	25	6	18	1		25	1,596,500 00
Stores—Estimated cost be- tween \$15,000 and \$30,000		59	59	7	39	13		59	1,073,900 00
Stores—Estimated cost less than \$15,000	1	55	56	28	22	6		56	237,100 00
Office buildings		32	32	10	19	3		32	977,250 00
Manufactories and workshops		141	141	33	93	15		141	2,471,980 00
School-houses		13	13	2	10	I		13	572,500 00
Churches		19	19	4	10	5		19	654,000 co
Public buildings-Municipal		35	35	14	15	6		35	2,489,500 co
Public buildings—Places of amusement, etc		9	9	3	3	3		9	677,000 00
Stables	1	107	108	38	62	8		108	1,067,775 00
Frame dwellings in Twenty- third and Twenty-fourth	2	569	571	385	136	50		571	1,633,040 00
Wards) Other frame structures		269	269	132	82	55		269	518,725 00
Totals	6	4,344	4,350	1,562	2,236	548	4	4,350	\$67,069,570 co

Pians and Specifications for Alterations to Buildings Filed and Acted upon.

CLASSIFICATION.	Pending last Report.	Received since.	Total.	Approved.	Amended and Approved.	Disapproved.	Now Pending.	Total.	ESTIMATED COST.
Dwelling-houses	7	649	656	305	280	67	4	656	\$1,355,408 00
Flats	1	67	68	22	40	6		68	399,570 00
Tenement-houses	1	362	363	215	122	25	I	363	519,755 00
Hotels and boarding-houses		38	38	16	19	3		38	124,990 00
Stores		244	244	112	95	36	· 1	244	1,194,988 00
Office buildings	2	77	79	41	32	5	1	79	459,701 ∞
Manufactories and workshops.	2	262	264	106	115	39	4	264	919,749 00
School-houses		26	26	12	10	4		26	260,415 00
Churches		19	19	12	3	4		19	65,850 00
Public buildings		64	64	26	25	12	1	64	701,344 00
Stables		68	68	27	32	9		68	105,495 CO
Frame buildings		411	411	249	100	61	1	411	290,720 00
Totals	13	2,287	2,300	1,143	873	271	13	2,300	\$6,397,985 00

## Violations of Law and Unsafe Buildings.

Nature.	Pending last Report.	Received since.	Total for Disposition.	Removed before Action by Courts.	Removed on Order of Courts.	Dismissed by Courts.	Discontinued.	Total Final Disposition.	Now Pending.	Forwarded for Prosecution.
Defective construction, materials, etc	133	519 587	652 816	518	5	33	33 52	555 602	97	343 385
Insufficient means of escape, fire-escapes, aisles obstructed, etc	1,136	930	2,856 1,351	931	5	3	491 48	2,469 984	3 <sup>8</sup> 7	1,053 69
Totals	1,919	3,756	5,675	3,935	11	40	624	4,610	1,065	1,850

## Complaints Received and Investigated.

Nature.	Pending last Report.	Received since.	Total.	Unfounded.	Remedied on Verbal Notice.	Notices to be 18811ed.	Total.	Now Pending.			
Defective flues	11	104	115	58	23	26	107	8			
Defective construction and materials.	I	41	42	25	3	12	40	2			
Defective leaders	10	31	41	10	3	20	33	8			
Erecting and altering without permit.	5	54	59	44	3	12	59				
Frame structures erected and re- moved without permit	6	204	210	97	13	89	199	11			
Heating apparatus, etc., received from Board of Fire Underwrit		148	148	129	5	14	148				
Hoistway openings not guarded	I	6	7	5	••	I	6	1			
Insufficient means of escape, fire- escapes out of repair, etc	385	1,786	2,171	501	214	574	1,289	882			
No iron shutters	• • •	8	8	3		3	6	2			
Stairway openings floored over		7	7	5	I		6	I			
Steam-pipes too near woodwork	2	6	8	3	1	3	7	1			
Unsafe buildings	35	871	906	458	68	330	856	50			
Unsafe freight elevators		9	9	5	4		9				
Totals	456	3,275	3,731	1,343	338	1,084	2,765	966			
Notices Issued.  To place fire-escapes on buildings 2,276 To remove violations of law 1,343 To repair passenger elevators 154 To remove unsafe buildings 1,567											
Proceeding	rs of.	Board	d of I	Exam	iners						
Number of meetings he	ld							52			
Number of cases acted								429			
Number of applicants								, - )			
examined						-		69			
Found qualified							• •	_			
*							•	20			
Not qualified			• • • •	• • • • •		• • • •	•	47			

Laid over.....

## Petitions for Modification of the Law.

Petitions for Mod	dificai	tion of	the L	aw.		
		Approve	D. DI	SAPPROVEI	р. То	TAL.
New buildings		229		43		272
Alterations		144		6		150
Iron shutters	••••	6		ı.		7
New buildings commenced					3	,687
New buildings completed					3	3,712
Alterations commenced						,886
Alterations completed					2	,090
Inspection of P	Passen <sub>é</sub>	ger El	levator	rs.		
Number inspected					2	2,015
Found to be in good order an	d fit f	for us	e		1	,893
Found not in compliance with	the l	aw				122
Disposition of Cases Found	d not	in Co1:	nplian	ce with	h Lar	v.
Nature.	Pending last Report.	Received since.	Total.	Law Complied with.	Now Pending.	Forwarded for Prosecution.
Defective cylinders		4	4	4		
		T	ı	1	1	
Defective car-bottoms	• • •					1
Defective car-bottoms Defective guide-rails and posts		15	16	14	2	3

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ΙI

Generally unsafe.....

New ropes required.....

Run by persons under 18 years of age......

Safety attachments out of order.....

Totals .....

## Location of Buildings Commenced and Completed.

Location.	Commenced.	COMPLETED.	In Progress.
South of Chambers street	19	26	16
Between Chambers and Houston streets	241	267	113
Between Houston and Twenty-third streets	180	190	86
Between Twenty-third and Fifty-ninth streets	306	373	154
Between Fifty-ninth and One Hundred and Tenth attreets, east of Fifth avenue.	485	576	420
Between Fifty-ninth and One Hundred and Tenth streets, west of Fifth avenue.	7°4	705	699
Between One Hundred and Tenth street and Har- lem river, east of Undercliff avenue	731	678	632
Between One Hundred and Tenth street and Har- lem river, west of Undercliff avenue	142	186	98
North of Harlem river	879	711	489
Totals, 1887	3,687	3,712	2,707
Totals, 1886	3,750	3,258	••••
Totals, 1885	2,940	2,832	• • • •
Totals, 1884	2,400	2,473	••••

The following Tabular Statements show the Operations of the Bureau since it became a part of the Fire Department, viz.: from August 1, 1880, to December 31, 1887.

									1
NATURE.	AUGUST I TO DECEMBER 31, 1880.	1881,	1882.	1883.	1884.	1885.	1886.	1887.	TOTALS.
Number of plans filed for new buildings	404	1,247	co£'1	1,450	1,663	1,843	2,085	2,131	12,123
Number of new buildings	973	2,682	2,577	2,623	2,897	3,368	4,092	4,344	23,556
Estimated cost of same	\$12,205,290	\$43,391,30c	\$44,793,186	\$44,304,638	\$41,461,208	#45,374,o13	\$58,750,733	\$67,069,570	\$357,349,938
Number of plans filed for buildings altered	368	1,411	1,615	1,764	2,286	2,331	2,409	2,122	14,306
Number of buildings altered	373	1,497	169'1	1,870	2,460	2,506	2,621	2,287	15,305
Estimated cost of same	\$681,136	\$4,142,070	\$4,267,181	\$4,540,436	\$4,659,532	\$7,594,825	\$5,900.314	\$6,397,985	\$38,192,479
Violations (other than fire-escapes) re-	240	761	1,086	1,134	1,975	1,536	1,184	1,106	9,022
Violations (other than fire-escapes) re-	248	838	0,070	1,239	1,894	1,565	1,198	1,157	6,209
Unsafe buildings reported	160	920	1,348	946	1,729	1,750	1,046	930	8,829
Unsafe buildings made safe	148	488	1,373	810	1,361	1,438	1,037	830	7,491
Unsafe buildings taken down	IO	78	205	73	87	134	86	103	788
Buildings reported for additional means) of escape in case of fire	277	544	1,443	1,562	2,662	3,048	2,231	1,720	13,487
Buildings provided with additional means) of escape in case of fire	84	825	842	1,328	1,964	2,245	1,506	1,975	692,01
Notices issued.	1,372	4,422	6,279	5,471	9,418	8,923	8,715	5.340	49,940
Complaints received	1,285	5,030	3,237	2,465	1,907	3,253	3,190	3,275	23,642
Cases forwarded for prosecution	123	723	1,022	1,404	1,839	2,648	2,033	1,863	11,555

#### Comparative Statement.

A comparison of the records of the late Department of Buildings during the last seven years and seven months of its existence with those of the Bureau of Inspection of Buildings in this Department during the first seven years and five months of its existence, shows the following as to the principal work done, together with the cost of administration during the periods named, in each, respectively:

	DEPARTMENT OF BUILDINGS, JANUARY 1, 1873, TO JULY 31, 1880.	Bureau Inspection of Buildings, August 1, 1880, To December 31, 1887.
Number of plans for new buildings and alterations	15,673	26,429
Number of buildings to be erected or altered	21,976	38,86r
Estimated cost of new buildings and alterations	\$159,979,200 00	\$395,192,417 00
Total cost of administration	\$686,734 79	\$338,250 00
Cost of administration per \$100 of estimated cost of buildings and alterations	40 cents.	9 cents.

The records of the cause and origin of fires show, as a result of the increasing efficiency of the Bureau of Inspection of Buildings, that the proportion of fires due to defective construction of buildings was seven per cent. in 1880 and two and three-fifths per cent. in 1887.

#### ATTORNEY TO THE DEPARTMENT.

## Violations of Law Relating to Combustibles, etc.

	For	Dispo	SITICN.			Disr	OSED O	F.			
				COMM	FORE ENCE- ET OF ATION.	AFT	TER CO	MMENCI		r	
NATURE OF VIOLATIONS.	Pending last Report.	Received since.	Total.	Recalled-Violations Removed.	Recalled for Other Reasons.	Violations Removed before Trial.	Judgment for Department.	Penalty Paid and Discontinued,	Dismissed.	Total.	Now Pending.
Selling kerosene-oil without license	19	73	92		18	42	τς		15	90	2
Combustible material in ex-		£	ı							••	1
Chimney fires		4	4					3	1	4	
Hoistways found open after (conclusion of business)		4	4			1			3	4	
Fireworks, chemicals, matches, etc., kept w thout permit	••	5	_ 5							••	5
Totals	1)	٤7	105		18	43	15	3	19	98	8

### Violations of Law Relating to Buildings.

	FOR DISPOSITION.			· DISPOSED OF.							
NATURE OF VIOLATIONS.				BEFORE COMMENCE- MENT OF LITIGATION.		AFTER COMMENCEMENT OF LITIGATION.					
	Pending last Report.	Received since.	Total.	Recalled-Violations Removed.	Recalled for Other Reasons.	Violations Removed before Trial.	Violations Removed after Judgment.	Dismissed by Court.	Di mis.ed for Irregu- larity or Insuffi- ciency of Papers.	Total.	Now Pending.
Defective construction, ma-) terials, etc	125	343	468	200	12	124	10	4	16	366	102
Erecting, altering or remov- ing without permit or after disapproval  Insufficient means of escape,	180	385	565	127	25	165	37	34	18	406	159
fire-escapes, aisles ob-	519	1,053	1,572	611	215	317	73	3	138	1,357	215
structed, etc) Unsafe buildings	16	69	85		I	34	7		6	48	37
Defective elevators	6	13	19	17		ı				18	1
Totals	846	1,863	2,709	955	253	641	127	41	178	2,195	514

### Miscellaneous Business.

Nature.	PENDING LAST REPORT.	RECE.VED.	TOTAL.	Disposed of.	Now Pending.
Opinions required	τ	13	14	τı	3
Agreements		2	2	. 2	
*Hotel cases—For rope fire-escape.		217	217	113	104
Totals	I	232	233	126	107

\*Action taken by request of the Mayor to enforce the provisions of chapter 720, Laws of 1887.

## Claims for Damages to Department Property, etc.

AGAINST.	NATURE OF CLAIM.	AMOUNT.	Disposi	TION.				
U. S. Illuminating Company Brush Electric Lighting Company		\$125 00		Dismissed.				
Received for Violation of Combustible Laws.								
As penalty, chimney fir	res		\$15	00				
Selling kerosene-oil without license, judgment								
Paid to Treasurer of the Relief Fund of the Fire								
Department, as requ	ired by law		\$42	50				
For V	iolation Building Laws.	-						
Violation case No. 948	of 1886, judgment		\$109	50				
Violation case No. 316	of 1885, judgment		109	50				
Fire-escape case No. 928 of 1886, judgment								
Unsafe case No. 69 of 1887, survey fee								
Violation case No. 682 of 1886, judgment								
Fire-escape case No. 46			59	56				
Fire-escape case No. 46	54 of 1883, judgment		59.	56				
Fire-escape case No. 24	101 of 1885, judgment.		117	50				
Fire-escape case No. 10	o79 of 1886, judgment		59	50				
	er as required by sect aws 1882, as amended 566, Laws 1887	by	\$650	12				

### Cases against the Department.

NAME OF PLAINTIFF.	Pending at last Report.	Received.	NATURE OF ACTION.	Disposed of.	Now Pending.
The People ex rel. William Dodge The People ex rel. Timothy Sullivan No. 1 The People ex rel. John McCabe The People ex rel. James P. Reilly The People ex rel. Timothy Sullivan No. 3 The People ex rel. Timothy Sullivan No. 3 The People ex rel. Francis J. The People ex rel. J. C. Tucker. Thomas O'Connor Mary E. Pinckney, administratrix James O'Brien Josephine Donnelly, an infant. Edward G. Dumahaut vs. John R. Shields	1 1 1		Certiorari to review removal Application for mandamus Damages for personal injuries. Damages for personal injuries. Damages for personal injuries. Cemporary personal injuries. Camages for personal injuries. Claim for salary	Relator reinstated. Writ quashed	
	9	4		3	10.

#### FIRE-ALARM TELEGRAPH.

In consequence of the enormous increase in the number of wires comprising the various electrical systems, and the reconstruction and repairs in constant progress all over the city, the fire-alarm wires are continually subject to interferences necessitating a large amount of work to maintain them in a proper condition of efficiency. Added to this has been the removal of the Central Office plant from Mercer street to Sixty-seventh street, the rearrangement of the various circuits made necessary by that change, and the renewal of a number of circuits and

placing a large number of new poles, all of which has involved an amount of labor and material largely in excess of that of any previous year.

In connecting the circuits to the new Headquarters, an underground system was adopted, which extends from the building through Sixty-eighth street easterly to Second avenue, and westerly to Lexington avenue; thence southerly to Sixty-fifth street; thence westerly to Fifth avenue, continuing thence through the Transverse (Central Park) road to Eighth avenue at Sixty-sixth street.

All the cables used in the system are insulated copper conductors, encased in lead, and known as the Waring antiinduction cables.

Length of conduit	6,579	feet.
Number of cables	30	
Number of conductors	180	
Total length of cables	57,059	feet.
Conductors furnished under contract	250,089	feet.
Conductors put in, in excess of amount of		
contract	32,265	"
Conductors, connecting vault (in rear of Head-		
quarters in Sixty-eighth street) to office	60,000	"
Total conductors from Central Office.	342,354	feet.

The 32,265 feet of conductors in excess of those purchased by the department, as above mentioned, were put in to guard against the contingency of accident to the others, and for future requirements. Changes and additions have since made the use of a portion of them necessary, and their purchase is under consideration.

The cables from the Mercer street building have been in constant use by the department since October, 1885, having been laid at that time for the use of the department for test,

and with the privilege of purchase or discontinuance, as stated in the report for 1885. The service furnished by these cables has been entirely satisfactory, and their acceptance is also now under consideration.

In renewing worn-out circuits, changing of routes and extensions of lines, one hundred and sixty-three miles of covered wire have been put up and a large quantity of old wire has been removed and condemned.

Seventy-two new poles have been set, fifty-three poles have been reset, seventy-three decayed poles condemned and removed, and two hundred and forty-four poles have been painted.

Twenty keyless doors have been placed upon street boxes, and ten new alarm-boxes have been added.

The submarine cable connecting Randall's Island was broken by a vessel's anchor, and owing to its weakened condition from age its repair was found impracticable, and a new cable was laid to replace it.

Numerous accidents to telegraphic apparatus have occurred through contact with the wires of the electric-lighting systems with the fire telegraph wires, and though the pecuniary damages sustained have been slight, it should be noted that every such incident renders inefficient and inoperative, for the time, a certain portion or section of the fire-alarm system, during which great losses might occur from failure of its proper working.

The large additions to the number of circuits for electriclighting, and the gradual deterioration in the insulated covering to these wires, increases the danger to which the fire-alarm system is exposed.

The fact that these wires for electric-lighting are placed and maintained by the various companies without regard to the interests of the public safety, is a strong argument in favor of securing through appropriate legislation such control and supervision over this work as may be necessary to insure the safety of the fire alarm system.

Eleven hundred miles of wire and sixty-seven hundred poles are at present in use in the overhead line equipment.

There are at present in service:

zaor de processo de constante d	
Regular street alarm-boxes 686	5
Special boxes, in city institutions, etc 26	;
Special boxes, in public schools	
Total in public service	843
Special boxes in places of amusement, manufac-	
tories, etc	
Duplicate special boxes in places of amusement,	
manufactories, etc	
Total in private service	223
Aggregate number of boxes	1,065

Measures will be taken to proceed with the extension of the underground system as early and as speedily as practicable.

The substitution of covered wire in place of the inferior uncovered wire should be continued where practicable, especially along the routes of the elevated roads, where the effect of the smoke and gases is found to be very injurious to uncovered wires.

The number of keyless doors in use on the street boxes is one hundred and fifteen.

Thirty-two lamp-posts have been altered and fitted with keyless door alarm-boxes and ruby colored glass lamps to make their location conspicuous.

Wherever practicable, especially in connecting with underground wires, it is intended to transfer the boxes to lamp-posts and fit them with keyless doors.

Alarms and calls have been received and transmitted as · follows · First alarms from street boxes. ...... 1.688 Second alarms..... 124 Third alarms 66 From special building boxes..... 20 From Police Department .... 5 Alarms \ Verbal .... 2 From Automatic Signal Co..... 62 From American District Messenger Co..... 5 For companies ..... 196 3 For increase of water pressure.... 126 Special Simultaneous..... calls. For insurance patrols ..... 121 For ambulances..... 290 For officers..... For Automatic Signal Co.'s stations...... I Notices of verbal alarms received by companies, etc.... Total alarms and calls ..... 3,813 Number of Fire Alarm Keys Issued. To the uniformed force..... 965 To others in the department.... ΙI To the Police Department..... 3,400 To the Fire Insurance Patrol ........... 147 To the District Telegraph Companies..... 26 2,245 2,922 To the Holmes Electric Protective Company....... 63 To the Public Schools..... 131 

### SANITARY STATISTICS OF THE UNIFORMED FORCE.

### Cases of Disability.

CAUSED BY—	Number.	Days Lost.
Injuries	219	7,025
Disease	510	10,681
Total	729	*17,706

<sup>\*</sup> Equivalent to daily average on the sick list of 48 members.

Examination of candidates for appointment to the Uniformed Force—

Number found	qualified	122
Number found	disqualified	75
Total		197

Deaths in the Uniformed Force.

CAUSE.	I Result of injuries received at fire.	5 Paralysis.	May 5, 1882 Mar. 11 Inflammation of bladder.	6 Consumption.	Pleurisy.	Result of injuries received at fire.	Result of injuries received on way to fire.	Result of mjuries received at fire.	8 Consumption.	31 Pneumonia.	2 Oct. 15, 1870 Aug. 12 Consumption.	3	Typho-malarial fever.	31 Bright's disease.	3 Consumption.	**
<b>Дате</b> оғ <b>Деатн.</b>		u,	Mar. 11		., 27	May	24	June 1		33	Aug. 12	Oct. 2	27	ıę ,,		∞
DATE OF DATE OF APPOINTMENT.	Dec. 22, 1883 Feb.	Nov. 1, 1870		52 Dec. 17, 1885 Apr.	Sept. 11, 1855	c881, or ylul	Oct. 30, 1865	Aug. 15, 1884 June	Nov. 23, 1877 July	Nov. 17, 1881	Oct. 15, 1870	Sept. 7, 1874 Oct.	Jan. 5, 1875	Oct. 22, 1874	Aug. 1, 1884 Dec.	Nov. 14, 1868
Company.	Engine No. 29		28	52	29	H. and L. No. I	Engine No. 54	H. and L. No. 8	Engine No. 35	H. and L. No. 18	2	Engine No. 38	9 "	,, 42	H. and L. No. 4	rst grade Engine No. 45
Скаре.	Fireman, 1st grade	" ıst grade	" 1st grade	" 3d grade	Engineer	Fireman, 1st grade	Engineer	Fireman, 1st grade	" 1st grade	" ist grade	" 1st grade	Assistant Foreman	Engineer	Fireman, 1st grade	" rst grade	" ist grade
NAME.	Francis J. Quinn	Henry Campbell	Michael J. McAuliffe	George Graney	Edward Hogan	James C. O'Shaughnessy	William Wray	James Rehill	Charles Morganroe	Seaman Johnson, Jr	John J. Murphy	William R. Ferris	Timothy Flynn	John H. McKniff	Thomas A. Hopkins	John Timon

## Deaths among those Retired from all Service.

Мамв.	GRADE.	COMPANY.	APPOINTMENT. RETIREMENT.	DATE OF RETIREMENT.	CAUSE.	DATE ОF DEATH.	DATE OF CAUSE.
Andrew C. McKelvey	Fireman, 1st grade Engine No. 18 Oct. 1, 1869 Jan. 1, 1881 Consumption Apr. 6 Consumption.	Engine No. 18	Oct. 1, 1869	Jan. 1, 1881	Consumption	Apr. 6	Consumption.
James McLean	" rst grade	61 ,,	Aug. 12, 1868	Oct. 1, 1879	184 grade 19 Aug. 12, 1868 Oct. 1, 1879 Hemip egia July 30 Peritonitus.	July 30	Peritonitus.
James McManus, No. 2	" 1st grade	H. and L. No. 3	July 4, 1873	Sept. 3, 1885	1st grade H. and L. No. 3 July 4, 1873 Sept. 3, 1885 Rheumatism Nov. 24 Consumption	Nov. 24	Consumption.
James McManus, No. 1	" Istgrade		" I3 Oct. 21, 1870 June 16, 1883 "	June 16, 1883		,, 28 ,,	,,

# Deaths among those Relieved from Service at Fires.

CAUSE.	Consumption.
Дате оғ Деатн.	Jan. 17 Consump
CAUSE.	onsumption
WHEN RELIEVED,	Apr. 20, 1883
DATE OF APPOINTMENT.	Jan. 17, 1856
COMPANY.	. H. and L. No. 1 Jan. 17, 1856 Apr. 20, 1883 C
GRADE.	Fireman, 1st grade
МАМЕ.	Thomas Gray

## Relieved from Service at Fires during the Year.

CAUSF.	Rheumatism.	" 36 Sept. 1, 1875 " I Hemorrhoids, defective vision and hearing, etc.	50 Oct. 10, 1870 " I Chronic rheumatism, defective vision, etc.	8 May 1, 1875 Mar. 1 Stiff ankle joint.	Rheumatism.	Engineer of Steamer Engine No. 47 Dec. 20, 1865 " 1 Rheumatism and general debility.
DATE OF RETIRE-	Feb. 1	I ,,	I ,,	Mar. 1	1 ,,	I ,,
DATE OF RETIRE-APPOINTMENT.	Sept. 8, 1865	Sept. 1, 1875	Oct. 10, 1870	May 1, 1875	Dec. 1, 1865	Dec. 20, 1865
Company.	Engine No. 30		3	3	1st grade H. and L. No. 11 Dec. 1, 1865 " 1 Rheumatism.	Engine No. 47
GRADE.	Fireman, 1st grade Engine No. 30 Sept. 8, 1865 Feb. 1 Rheumattsm.	" 1st grade	" ist grade	" ıst grade	" ıst grade	Engineer of Steamer
Маме.	Thomas J. Cortissos	William J. Renshaw	Peter Gallagher	Alphonso Doncourt	Simon Hexter	Joseph Creagle

### APPARATUS.

The following new apparatus was purchased during the year:

Two new steam fire-engines (see "Description of Steam Fire Engines" in a subsequent part of this report for particulars), one Hayes' extension hook and ladder truck, and seven four-wheeled hose tenders.

### Repair Shop Work.

One Chief of Battalion wagon was built.
One water-tower and one wagon were rebuilt.
The following extensive repairs were made:

Twenty to steam fire-engines, two to floating engines, twenty-four to hose tenders, fourteen to hook and ladder trucks.

The following ordinary repairs were made:

Two hundred and three to steam fire-engines, eight to floating engines, seventy-nine to hose tenders, sixty-three to hook and ladder trucks, four to water-towers, two hundred and sixty-six to wagons of various kinds.

Six sets of sliding-poles were put up in company quarters. Seven sets of single harness, two sets of double harness, and a large number of bridles and other parts of harness were made and furnished.

A large amount of miscellaneous repairs to apparatus, hose and harness, and painting was also done.

The following articles were furnished to the various companies:

Forty-two jumping nets, nine iron rams and wall cutters, six sub-cellar pipes and nozzles, thirty-nine hose-hoisters, six hydrant connections, twenty-six thousand five hundred feet of hose.

### Inventory of Apparatus.

		In Service.	Spare.	TOTAL.
Marine steam fi	re-engines (Engine Companies Nos. 43 and 51)	2		2
	(First size	8	8	16
	Second size	34	10	44
Steam fire-engi	nes { Third size	6	2	8
	Fourth size	15		15
	Fifth size	2		2
Hose-tenders, f	our-wheeled	35	5	40
Hose-tenders, t	wo-wheeled	28	16	44
Water-towers		3		3
	Roller-frame, with extension ladder { ist size	15	3 )	
	Roller-frame, with extension ladder 2d size	7	}	25
Hook and lad-	Goose-neck, without extension ladder	6	I	7
der trucks	Roller-frame, without ladders, first size		I	I
	Turn-table, first size	3		3
Chemical fire-en	ngines	(	10	10
Fuel wagons		16	I	17
Wrecking truck		I		ı
Chemical fire-ex	ktinguishers	139		139
Hand-engines.		(	3	3
Hose carriages			I	1
Hose jumpers			14	14
Supply wagon		ı		I
Chief of Battali	on wagons	12	4	16

### Inventory of Hose.

	Size.	Number of Feet.
Combination rubber hose	2 inch.	400
Combination rubber	21/2 "	108,300
" tapering from	3½ to 2½ "	400
Cotton, rubber lined	21/2 "	73,905
Linen	21/2 "	300
Combination rubber	31/4 "	4,369
46	4 "	112
"	6 "	100
Cotton, rubber lined	3½ "	1,000
Total		186,586

Description of Steam Fire Engines-Classified.

		ENGINE COMPANY NOW USING.	Spare,	ž	"	3	"	**	Unserviceable.	No. 18.	Spare.	No. 13.	33.	7.	14.	Ι.	19.	55.
	J. S.	Number.	142	143	161	192	193	195	284	464	527	252	351	352	380	381	383	385
The state of the s	Manufacturer's-	Name.	Amoskeag	;	:	;	;;	::	:	:	Clapp & Jones.	Ahrens	Clapp & Jones.	**	**	**	**	*
	aced service.	Mhen first pluster	Sept., 1865	Sept., 1865	Sept., 1866	Sept., 1866	Oct., 1866	Nov.; 1866	Oct., 1872	Sept., 1874	Mar., 1879	Sept., 1880	Oct., 1880	Nov., 1880	June, 1882	July, 1882	Aug., 1382	7,890   Sept., 1882
	Water.	Weight with	8,800	8,800	8,800	8,800	008,8	008,8	009.6	4 1/2 8,000	4½ 7,320	7,575	7,450	7,450	7,890	7,890	7,890	7,890
1	IN OF	Pump.	7,4	414	474	41/4	+ <sup>1</sup> / <sub>4</sub>	474	43/4			41/2	4 7/8	57%	2	25	Ŋ	- 2
1	Size in Inches of	Stroke of Piston.	12	12	12	12	12	12	∞	∞	∞	∞	7	7	7	7	7	
1	INC	Steam Cylinder.	∞	∞	∞	∞	∞	∞	81/2	75%	75%	71/4	∞	∞	81/8	81/8	8/8	81/8
		Engine.	Double	:	:	:	3	*	*	:	*		*	,	***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
The state of the s	STYLE OF—	Boiler.	Tubular	Drop tube			***	Tubular	Drop tube	, , ,		Coil	Drop tube	***	***		3	;
and the same of an article and the same of		Frame.	Barrel tank	99	, , , , , , , , , , , , , , , , , , , ,	"	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Straight frame	*Crane neck				:::::::::::::::::::::::::::::::::::::::		***	***	
-		PIZE.	_	_					-	_	-				_		_	н

19   Ward's Island.	No. 26.	Spare.	*	*	·	No.12.	Spare.	*	*	**	No. 16.	Spare.	No. 36.	28.	31.	21.	25.	ņ	27.	39.	Spare.	No. 34.	
19	147	148	157	158	159	160	191	162	163	164	165	991	132	226	227	228	229	230	295	962	301	302	
<del>-</del>		-	:	:	:	:	:	:	:	:	:	:	:	:			:	:	:	:	:		
ce.ig.		·	•		•	·	•	•	٠	•	•	٠	•	٠	٠	٠	•		•				
12   434   6,750   Dec., 1860   Amoske 3	:	3	*	*	*	3	3	3	3	*	2 *	ä	3	* 	3	3	3	3	*	3	3	3	
1860	1865	1865	1865	1865	1866	9381	9981	9981	9981	1856	1866	9981	1865	1867	1867	1867	1857	1867	<b>1868</b>	898I	8981	8981	
Dec.,	Oct., 1865	Nov., 1865	Dec., 1865	Dec., 1865	Jan., 1866	Jan., 1866	Feb., 1866	Feb., 1866	Mar., 1866	Apr., 1856	Apr., 1866	Aug., 1866	May, 1865	Mar., 1867	Mar, 1867	Mar., 1867	Apr., 1857	May. 1867	Aug., 1868	Sept., 1868	Sept., 1868	Nov., 1868	
750   ]	6,750 (	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,750	6,050	6,700	6,700	6,700	002'9	6,700	6,700 4	6,700	6,700	6,700	
34 6,	434 6,	434 6,5	434 6,	434 6,	434 6,	434 6,	434 6,	434 6,	434 6,3	434 6,;	434 6,;	434 6,	4 7/8 6,0	41/8 6,	41/8 6,;	41/8 6,;	41/8 6,;	41/8 6,	41/8 6,	41/8 6,;	41/8 6,;	41/8 6,	
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																					:		
Single												3	3	Double	3	3					:	3	
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								:	:		Sectional coil tube.	Tubular		coil	e	:	:	:	:	 	:		
ılar							o tul	;	3	Tubular	onal	ılar		onal	tul	,,	,	,,	,,	tal	ılar.	·	
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U tank  Tubular	,,	33	3	3	;	33	"	;	;	"	*	;	Harp tank	Straight frame	"	*	;	**	. 3	,,	9,9	3	
C)	63	64	63	64	64	01	61	0	63	61	6/	0	61	0	63	0	63	(3	(9	(1)	(9	0	

\* Altered from self-propeller.

-		Engine Company Now Using.														Ward's Island.			
		9° 5	No. 9.	24.	23.	15.	.9	30.	11.	· · · · · · · · · · · · · · · · · · ·	54.	12.	29.	ů.	. r6.	Ward'	No. 13.	20.	32.
	18	Number.	108	491	359	360	361	362	363	437	438	439	440	441	455	7	358	360	413
	MANUFACTURER'S-	Name.	La France	Clapp & Jones.	Amoskeag	,,,	;	;	::	;	*	:	:	*	:	Gould	Ahrens	3	Clapp & Jones .
-	sed srvice.	When first places	July, 1886	May, 1887	Feb., 1871	Feb., 1871	Mar., 1871	Mar., 1871	Mar., 1871	June, 1873	41/4 6,950 June, 1873	July, 1873	Sept., 1873	Sept., 1873	Sept., 1873	Nov., 1868	July, 1883	July, 1883	45/8 6,550 July, 1883
-	ater.	Weight with W	45/8 8,250	7,240	41/8 6,800	008'9	008'9	008'9	41/8 6,800	056'9	6,950	6,950	6,950	6,950	4½ 6,950	4½ 6,8co	6,210	6,210	6,550
1	7 OF	Pump.	4	47/8	41/8	41/8	41/8	41/8	4 1/8	47,4	47,4	414	414	47,4	47,4	47,4	41/4	4,4	
	Size in Inches of	Stroke of Piston.	∞	7	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	∞	
	INC	Steam Cylinder.	7.1%	71/2	8//9	67%	67/8	8//9	67/8	9//9	8//9	8//9	8//9	67%	67/8	63/4	634	63%	71/2
		Engine.	Double	;	:	:	:	:	*	*			;	*		*	*	*	;
	STYLE OF—	Boiler.	Nest tube	Sectional coil tube	Drop tube	;				Tubular	Drop tube	***	"	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Coil	***	Drop tube
		Frame	Crane neck	***		***	***	;	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***	,		***	***	***		*	*	, , , , , , , , , , , , , , , , , , , ,
1		Size	8	8	0	64	0	8	8	8	0	8	8	8	0)	8	0	0	- 8

27.	17.	31.		Spare.	*	No. 37.	38.	47.	45.	42.	Randall's Island.	No. 10.	+4+	53.	33.	40.	.64	41.	18.	22.	ທໍ	ń
415	780	463	473	36	216	517	519	520	354	356	:	359	362	365	368	370	371	375	430	432	433	434
:	Silsby	Clapp & Jones.	ï	Amoskeag	:	;	;	;	Ahrens		Clapp	Clapp & Jones.	*	÷	*	*	3	÷	*	;	*	"
7   45/8   6,485   Aug., 1883	July, 1884	July, 1885	Aug., 1886	May, 1861	Dec., t875	Feb., 1877	Feb., 1877	Feb., 1877	July, 1883	July, 1883	Aug, 1865	June, 1881	June, 1881	July, 1881	Oct., 1881	Oct., 1881	Nov., 1881	Dec., 1881	April, 1884	April, 1884	May, 1884	May, 1884
45/8 6,485	6,400	45/8 6,885	478 6,74c	41/4 5,550	43% 5,700	43% 5,700	43% 5,700	43/8 5,700	5 4,665	5 4,665	:	51/2 5,750	5½ 5,750	51/2 5,750	51/2 5,300	5½ 5,300	5½ 5,300	5½ 5,300	51/2 5,950	51/2 5,950	51/2 5,950	51/2 5,950
	:	7	7	91/2	6	6	6	6	7	7	:	9	9	9	9	9	9	9	9	9	9	9
71/2	:	71/2	71/2	734	734	734	734	734	00	00	:	914	914	914	914	91/4	914	974	914	974	914	974
***************************************	Rotary	Double	:	Single	***************************************	***************************************				:	***************************************		3	***************************************	*	:	:		;		,	33
	,		Sectional coil tube	Drop tube	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Tubular			Coil		Tubular	Drop tube	***************************************		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		***************************************	***************************************		• • • • • • • • • • • • • • • • • • • •	***************************************	39
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3	3	"	Harp tank	***************************************	*	***************************************		Straight frame		Horizontal	Crane neck	***************************************	, , , , , , , , , , , , , , , , , , , ,		***************************************	***************************************	"		,	**	
0	0	61	8	3	3	3	3	3	8	3	3	4	4	4	4	4	4	4	4	4	4	4

H	COMPANY NOW USING.	No. 26.	35.	48.	46.	50.	52.	43.	51.	
<u>.</u>	Number.	436	438	409	417	397	452	513 }	405 406	
Manufacturer's-	Name.	Clapp & Jones.	ž	ş	;	ž	;	Amoskeag	April, 1883   Clapp & Jones	
iced service.	slq 121A n9dW 2 ni	May, 1884	June, 1884	July, 1883	Aug., 1883	Nov., 1882	Nov., 1884	May, 1875	April, 1883	
Vater.	Weight with	5,950	5,950	51/2 4.745	51/2 4,745	45% 4,680	5,030	$\widetilde{:}$	<u> </u>	
ZH	Pump.	51/2	51/2	51/2	51/2	45/8	47/8	n n	71/2	
Size in Inches of—	Stroke of Piston.	9	9	٥,	9	9	9	12	0 0	ı
SINCH	Steam Cylinder.	974	974	91/4	91/4	71/2	7,1%	H H	91 }	
	Engine.	Single		***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*		Double	3	
STYLE OF-	Boiler.	Drop tube	*	3	***	***	***	Tubular	39	
	Frame.	Crane neck	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Straight frame	*	***	Crane neck	Marine engine	3	
	Size.	1 4	4	4	4	'n	Ŋ	н	н	-

# Description of Hook and Ladder Trucks-Classified.

Wнеке Used.	Hook and Ladder 3, 12 and 16.	Hook and Ladder 6, 9 and 15.	Hook and Ladder 8 and 10.	Hock and I adder 18.	Hook and Ladder 2, 5, 7, 11, 14 and 18.	Hook and Ladder 1, 4 and 13, and 2 spare.	Spare.	Not used.	Engine 47, 48, 50, Hook and Ladder 17.	Engine 38, Hook and Ladder 13.	Engine 52.	Ward's Island.	Hook and Ladder 9.	Hook and Ladder 5.	Engine 49.	Hook and Ladder 19 and Randall's Island.	Spare.
LONGEST LADDER.	85 feet extension	73 "	73 "	73 "	, 0,	,, 99			50 feet extension	,, ,,		43 feet	40 " 40	38 "	, 35	30 " so	
MANUFACTURER.	La France Mfg. Co	Fire Extinguisher Mfg. Co	Repair Shops	Allerton Works	P.epair Shops	77	Allerton Works	Babcock Mfg. Co	Repair Shops	Fire Extinguisher Mfg. Co	99						
STYLE.	Turn-table	Roller frame	3	,	*	99	3	;	***	;	***	Goose neck	•	,	***	:	*
No. Size.	ıst	ıst	ıst	ıst	ıst	ıst	ıst	ıst	2d	2d	2d	3d	3d	3q	3q	3d	3d
0	60	n	63	H	9*	2	н	н	4	63	н	H	н	н	н	64	H

\* One originally built by Hartshorne, New York.

### HORSES.

December 31, 1886, number of horses on hand 335  Purchased since
Died
29
December 31, 1887, number on hand 337
A. Dudadin
On Probation.
December 31, 1886
Received
Accepted       31         Rejected       57
88
Remaining on probation, December 31, 1887

### DEPARTMENT BUILDINGS AND SITES.

### New Buildings.

The new quarters for Engine Company No. 55, at No. 173 Elm street, and Hook and Ladder Companies Nos. 16 and 18, at No. 159 East Sixty-seventh and No. 84 Attorney streets, respectively, were finished and occupied by the companies named.

A contract was also made for building new quarters for Engine Company No. 54, at No. 304 West Forty-seventh street.

### Alterations and Repairs to Buildings.

Extensive alterations and repairs were made to the following buildings:

Headquarters, Hospital Stables, and the quarters of Engine Companies Nos. 3, 4, 9, 12, 14, 16, 19, 22, 30, 38, 44 and 55, and Hook and Ladder Companies Nos. 6, 9 and 18.

Ordinary repairs, involving various kinds of mechanical work, were also made to the buildings of the Department, aggregating ninety-eight different jobs of work.

### New Sites.

Under the provisions of section 13, chapter 742 of the Laws of 1871, requisition was made on September 22 for locations for two new apparatus houses, one in the vicinity of Eighty-fourth street and Tenth avenue, and the other in the vicinity of One Hundred and Tenth street and Tenth avenue. New companies in these locations have become necessary by reason of the increase in the number of buildings in these sections of the city. The department selected two lots for this purpose, located respectively on the south side of Eighty-third street, about two hundred feet west of Ninth avenue, and on the south side of One Hundred and Thirteenth street, about sixty feet west of Tenth avenue, and recommended their purchase by the city. At the close of the year, the matter was still under consideration by the authorities.

### Buildings Occupied by or Under Control of the Department.

Headquarters—Office of Commissioners, Bureaus—Chief of Department, Inspector of Combustibles, Fire Marshal and Inspector of Buildings, and offices of Attorney, Fire Alarm Telegraph and Medical Officers, and School of Instruction—Nos. 157 and 159 East Sixty-seventh street.

The removal of the Fire Alarm Telegraph Central Office from the old headquarters in Mercer street was completed on June 14.

Repair Shops, Nos. 130 and 132 West Third street.

Hospital Stables, Ninety-ninth street, between Ninth and Tenth avenues.

Training Stables, No. 58 Lawrence street.

Bell-tower and Lookout, Mount Morris Square.

Bell-tower and Lookout, Fulton avenue, between One Hundred and Sixty-seventh and One Hundred and Sixty-eighth streets, rear of quarters of Engine Company No. 42.

Lookout, southwest corner of Tenth street and Sixth avenue, Jefferson Market Court-house.

Engine Company No.	1, No. 165 West Twenty-ninth street.
"	2, No. 530 West Forty-third street.
	(Fuel Depot No. 5.)
66	3, No. 417 West Seventeenth street.
"	4, No. 39 Liberty street.
"	5, No. 340 East Fourteenth street.
"	б, No. 100 Cedar street.
4.6	7, No. 22 Chambers street.†
"	8, No. 165 East Fifty-first street.
46	9, No. 55 East Broadway.
"	10, No. 8 Stone street.
"	11, No. 437 East Houston street.
66	12, No. 261 William street.
"	13, No. 99 Wooster street.
"	14, No. 14 East Eighteenth street.
66	15, No. 269 Henry street.
4.6	16, No. 223 East Twenty-fifth street.
46	17, No. 91 Ludlow street.
"	18, No. 132 West Tenth street. (Fuel
	Depot No. 4.)
"	19, No. 355 West Twenty-fifth street.
	(Fuel Depot No. 12.)
"	20, No. 47 Marion street.

21, No. 216 East Fortieth street.

Engine Company No.	22, No. 159 East Eighty-fifth street.
	(Fuel Depot No. 14.)
"	23, No. 235 West Fifty-eighth street.
"	24, No. 78 Morton street. (Fuel
	Depot No. 9.)
"	25, No. 342 Fifth street.
"	26, No. 220 West Thirty-seventh st.
"	27, No. 173 Franklin street.
"	28, No. 604 East Eleventh street.
"	29, No. 193 Fulton street.
"	30, No. 253 Spring street.*
"	31, No. 116 Leonard street.
"	32, No. 108 John street.*
"	33, No. 15 Great Jones street.
"	34, No. 440 West Thirty-third street.
"	35, No. 223 East One Hundred and
	Nineteenth street.
	36, No. 2333 Fourth avenue.
"	37, No. 83 Lawrence street.
"	38, Tenth avenue, between One Hun-
	dred and Fifty-fourth and One
	Hundred and Fifty-fifth streets.
66	39, No. 157 East Sixty-seventh street.
66	40, No. 153 West Sixty-eighth street.
66	41, No. 501 North Third avenue.
"	42, Fulton avenue, between One
	Hundred and Sixty-seventh
	and One Hundred and Sixty-
	eighth streets.
66	43 (Floating engine), foot of Clinton
	street, East river.
"	44, No. 221 East Seventy-fifth street.
66	45, North side Tremont avenue,
	between Southern Boulevard

and Vyse street.

Engine Company No.	46, Morris street, between Madison and Washington avenues.*
"	47, Tenth avenue, between Ninety-
	seventh and Ninety-eighth
	streets.
"	48, Webster (formerly Thomas) ave-
	nue, near Kingsbridge road.
66	49, Blackwell's Island.
• "	50, One Hundred and Sixty-sixth
	street, between Washington
	and Third avenues.
66	51 (Floating engine), foot of West
	Thirteenth street.
46	52, Riverdale avenue, near junction
	of Westchester avenue.
"	53, No. 175 East One Hundred and
	Fourth street. (Fuel Depot
	No. 15.)
"	54, No. 304 West Forty-seventh street
	(temporary quarters, No. 219
	West Forty-sixth street).
66	55, No. 173 Elm street.
Hook and Ladder Con	mpany No. 1, No. 26 Chambers street.†
" "	
	street. (Fuel Depot
	No. 13.)
"	3, No. 108 East Thirteenth
	street.
"	4, No. 788 Eighth avenue.
66 66	
"	6, No. 77 Canal street.
66	
	eighth street.
"	3
	street.

TT 1 1 T 1 1		N. N. Du i i
Hook and Ladd		No. 9, No. 209 Elizabeth street.
	• 6	10, No. 191 Fulton street.
"	"	11, No. 742 Fifth street.
"	"	12, No. 243 West Twentieth street.
<b>د</b> د	"	13, No. 159 East Eighty- seventh street.
ε,	"	14, No. 120 East One Hundred and Twenty-fifth street.
66	"	15, Old Slip, between Water and Front streets.
66	<b>66</b>	16, No. 159 East Sixty- seventh street.
<i>cc</i>	"	17, One Hundred and Forty- third street, near Third avenue. (Fuel Depot No. 16.)
"	"	18, No. 84 Attorney street.
u	"	19, Ogden avenue, between Birch and Union streets.*
Fuel Depot No.	1, No. 5 D	uane street.
"	2, No. 160	East Thirty-third street.
"	3, No. 106	East Thirteenth street.
"	4 (see Eng	gine Company No. 18).
66	5 (see Eng	gine Company No. 2).
"	6, No. 180	Clinton street.
66	7, No. 28	Beaver street.†
66		209 East One Hundred and ty-second street.
"		gine Company No. 24).
"		Washington street.
"		Chrystie street.
"		gine Company No. 19).

Fuel Depot No. 13 (see Hook and Ladder Company No. 2).

- " 14 (see Engine Company No. 22).
- " 15 (see Engine Company No. 53).
- " 16 (see Hook and Ladder Company No. 17).

Store-house, No. 20 Eldridge street.

- " No. 180 Clinton street. (Fuel Depot No. 6.)
- " No. 199 Chrystie street, also occupied by second section of Hook and Ladder Company No. 9 and Fuel Depot No. 11.
- " Division street, near Boston road.
- " No. 432 West Thirty-sixth street.

The locations marked thus (\*) are leased by the department; all others are city property. The locations marked thus (†) are only in part occupied by the department. At the locations marked thus (||) lots in rear or adjacent are leased by the department.

RECEIPTS AND DISBURSEMENTS OF THE RELIEF FUND, 1871-1887.

### Receipts.

- Froм-	1871, 7 Months.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.
Metropolitan Fire Department Relief Fund	\$7,340 07				:		:	:	
Fines	646 51	#62I 64	\$843 31	\$734 79	\$972 51	\$567 15	\$489 46	\$568 98	\$568 o3
Donations	:	100 00	1,050 00	374 00	:	00 COI	:	100 00	:
Penalties	:	170 63	902 34	705 00	2,389 63	1,600 00	1,925 co	1,250 00	350 00
Oil licenses	26,230 00	27,528 50	30,399 50	31,827 50	29,454 50	27,285 00	30,103 00	29,750 00	30,300 00
Fireworks permits	495 00	509 00	537 00	522 75	519 25	645 50	472 25	332 75	355 00
Interest Interest	275 55	38 666,r	4,258 91	9,298 22	10,410 44	11,795 22	19,210 91	15,493 9o	18,680 49
Foreign insurance tax	:	9,942 30	12,072 04	16,136 25	15,281 24	12,878 98	12,112 IO	16,630 02	17,582 80
Powder licenses	:	2II CO	571 50	24I 50	306 50	385 50	384 50	192 00	180 00
Special permits	:	:	:	:	:	:	:	258 00	274 00
Chimney fires	:	245 00	440 00	375 00	355 00	245 co	260 00	240 00	180 oo
Fires in street permits	:	:	:	:	:	50	41 75	85 00	64 00
Sales—Seized combustibles	:	:	24 25	:	:	:	:	:	6 30
Sales—Sample oils	:	:	:	27 06	:	:	:	10 00	:
Excise licenses	:	:	:	:	:	:	:	:	:
Absences without leave	:	:	:	:	:	:	:	:	
Special leaves	:	:	:	:	:	:	:	:	:
Sales-Condemned horses, etc	:	:	:	:	:	:	:	:	
New York State Dairy Commission	:	:		:	:	:	. :	:	:
Totals	\$34,987 13	\$41,327 93	\$51,108 85	\$60,242 07	\$59,689 07	\$55,502 85	\$62,998 97	\$64,910 65	\$68,540 62

RECEIPTS AND DISBURSEMENTS OF THE RELIEF FUND, 1871-1887-(Continued). Receipts.

29,76 00 328 58 58 58 59 59 52 50 59 52 50 50 52 50 50 50 50 50 50 50 50 50 50 50 50 50	#1.304 55 100 00 325 00 31,270 00 440 75 23,468 10	\$1,966 33 460 00 32,720 00 462 75 20,347 85	\$1,703 23 100 00 400 00 35,270 00 513 50 24,764 43	\$2,005 84 258 00 550 00 36,550 00 36,557 30	\$1,839 84 580 00 200 00 37,100 00 620 50	\$2,249 50 2,115 00 177 50 39,500 00 627 75	\$7,340 07 19,019 36 4,887 00 12,330 10 536,228 00 8,410 25 266,021 89
\$1,068 89 \$868 80 \$400 00 \$525 00 \$303 50 \$409 25 \$303 50 \$409 25 \$22,140 20 \$22,885 \$8 \$178 00 \$186 00 \$38 00 \$370 00 \$36 00 \$36 00 \$36 00 \$36 00 \$36 00 \$36 00 \$36 00 \$36 00	\$1,304 100 325 31,270 440 23,468	\$1,966 33 460 00 32,720 00 462 75 20,347 85	\$1,703 23 100 00 400 00 35,270 00 513 50 24,764 43	\$2,005 84 250 00 36,550 00 36,550 00 20,567 30	\$1,839 84 580 00 200 00 37,100 00 620 50	\$2,249 50 2,115 00 177 50 39,500 00 627 75	19,019 36 4,887 00 12,330 10 536,228 00 8,410 25 266,021 89
\$55 00 \$5 00 \$5 00 \$1,180 00 \$35 50 \$409 25 \$22,140 20 \$22,140 20 \$22,	325 31,270 440 23,468	460 00 32,720 00 462 75 20,347 85	100 00 400 00 35,270 00 513 50 24,764 43	258 00 550 00 36,550 00 583 75 20,567 30	580 00 200 00 37,100 00 620 50	2,115 00 177 50 39,500 00 627 75	4,887 00 12,330 10 536,228 00 8,410 25 266,021 89
\$525 co	31,	460 00 32,720 00 462 75 20,347 85	400 00 35,270 00 513 50 24,764 43	36,550 00 36,550 00 583 75 20,567 30	200 00 37,100 00 620 50	177 50 39,500 00 627 75	536,228 00 8,410 25 266,021 89
5. 30,760 ∞ 31,180 ∞ 36, 180 ∞ 31,180 ∞ 31,180 ∞ 31,180 ∞ 31,180 ∞ 31,180 ∞ 32,140 ≥ 22,140 ≥ 22,188 58 ≈ 178 ∞ 370 ∞ 328 ∞ 370 ∞ 328 ∞ 305 ∞ 300 ∞ 30		32,720 00 462 75 20,347 85	35,270 00 513 50 24,764 43	36,550 00 583 75 20,567 30	37,100 00	39,500 00	536,228 00 8,410 25 266,021 89
5. 50 50 409 25 tax	23,468	462 75	513 50 24,764 43	583 75	620 50	627 75	8,410 25 266,021 89
tax.		20,347 85	24,764 43	20,567 30			266,021 89
tax. 178 00 328 00 290 00 60 60 60 60 60 60 60 60 60 60 60 60	188	:	:	:	20,712 94	21,711 99	,
178 % 178 % 178 % 178 % 178 % 179 %	188				:	:	112,035 73
328 00 85 290 00 8 31 328 00 8 31 328 00 8 32 32 32 32 32 32 32 32 32 32 32 32 32		198 00	00 061	оэ 891	172 co	co 491	3,916 50
290 00	366 00	722 00	872 00	806 00	∞ 986 ∞	oo 890'I	6,020 00
56 50	320 00	360 00	325 00	441 50	355 00	300 00	5,036 50
	00 63 00	29 00	60 50	05 69	∞ 89 ∞	65 50	698 25
Sales—Seized combustibles 10 00 63 25	35 37	:	6 75	:	:	:	145 92
Sales—Sample oils 1 35 . 50 00	:	:	:	:	:	:	88 41
Excise licenses	:	:	:	18,397 00	62,406 50	94,684 00	175,487 50
Absences without leave	:	:	:	176 00	316 14	462 42	954 56
Special leaves	:	:	:	2,081 96	3,621 65	4,098 38	9,801 99
Sales—Condemned horses, etc	:	:	:	513 90	3,114 07	2,538 75	6,166 72
New York State Dairy Commission	:	:	:	:	250 00	:	550 00
Totals	8 \$57,880 77	\$57,295 93	\$64,205 41	¥83,168 75	\$132,612 64	\$169,762 79	\$1,175,738 75

### Disbursements.

$F_{OR^{eno}}$	1871, 7 Months.	1872.	1873.	1874.	1875.	1876.	.4281	1878.	,6281
and the same of th					-				
Premium on city bonds	:	:	:	:	:	:	:		:
Salaries	\$5,950 45	\$5,950 45 \$12,276 86	:	:	:	:	:	:	:
Expense account	26 506	1.460 54	\$1,223 09	\$1,569 70	\$1,292 96	\$1,745 23	\$2,106 54	\$2,014 49	\$1,075 23
Pay of relieved men	:	:	:	:	:	:	:	2,199 96	1,799 95
Pensions of retired men		:	:	:	:	:	:	6,068 40	8,073 24
Pensions of widows and orphans	:	:	05 618,1	2,625 00	2,736 68	3,344 53	4,220 09	5,800 71	6,329 94
Totals	1	\$13,737 4o	\$3,042 59	\$6,856 42 \$13,737 40 \$3,042 59 \$4,194 70	\$4,029 64	\$5,089 76	\$4,029 64 \$5,089 76 \$6,326 63 \$16,083 56	\$16,083 56	\$17,278 37

For—	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	Totals.
								000	000000000000000000000000000000000000000
Fremium on city bonds		:	:					00 00/12#	18.227 31
Expense account	% 818	\$20 00	\$38.50	\$19 25	#25 85			73 56	13,590 41
Pay of relieved men	928 3I	858 29		10,789 04	10,427 46	\$9,838 58	\$17,636 20	23,134 33	85,044 67
Pensions of retired men	12,906 19	21,211 78		24,018 17	44.274 59		55,550 15 56,958 68	55,755 I9	308,006 40
Pensions of widows and orphans	13,339 63	13,339 63 15,388 16 17,561 27	17,561 27	20,369 40	23,133 65	25,116 27	28,707 58	30,261 94	200,754 35
	\$27,192 63	\$37,478 23	\$48,222 32	\$27,192 63 \$37,478 23 \$48,222 32 \$55,195 86 \$77,862 55 \$90,505 00 \$103,302 46 \$111,925 02	\$77,862 55	\$90,505 00	\$ro3.302 46	\$111,925 02	\$628,323 14

### Recapitulation.

\$i,i75,738 75	628,323 14	\$547,415 61	
Receipts, June 1, 1871, to December 31, 1887	Disbursements, June 1, 1871, to December 31, 1887	Balance on hand, December 31, 1887	

### Receipts and Disbursements of the New York Fire Department Life Insurance Fund—1871–1887.

### RECEIPTS. 1871 ..... \$5,040 00 1872 ..... 7,773 00 1873 .... 8,789 00 1874 ...... 6,395 00 12,508 00 1875 ..... 1876 ..... 11,074 00 1877 ..... 8,965 00 1878 9,241 00 1879 9,293 00 9,640 00 1881 ..... 10,333 47 1882 ..... 10,917 34 1883 ..... 11,747 15 12,845 59 13,113 93 1886 17,686 53 1887 ..... 19,521 07 DISBURSEMENTS. 1871 \$5,000 00 1872 ..... 6,000 00 1873 ..... 9,000 00 1874 ..... 5,000 00 14,000 00 1876 ..... 8,000 00 1877 .... 8,000 00 1878 ..... 3,000 00 1879 ..... 9,000 00 1880 ..... 12,000 00 1881 ..... 10,000 00 1882 ..... 15,000 00 0,000 00 1884 ..... 13,000 00 19,000 00 17,000 00 1887 ..... 20,000 00 Total disbursements ..... 182,000 00

Balance on hand December 31, 1887.....

\$2,883 08

### NEW YORK FIRE DEPARTMENT LIFE INSURANCE FUND.

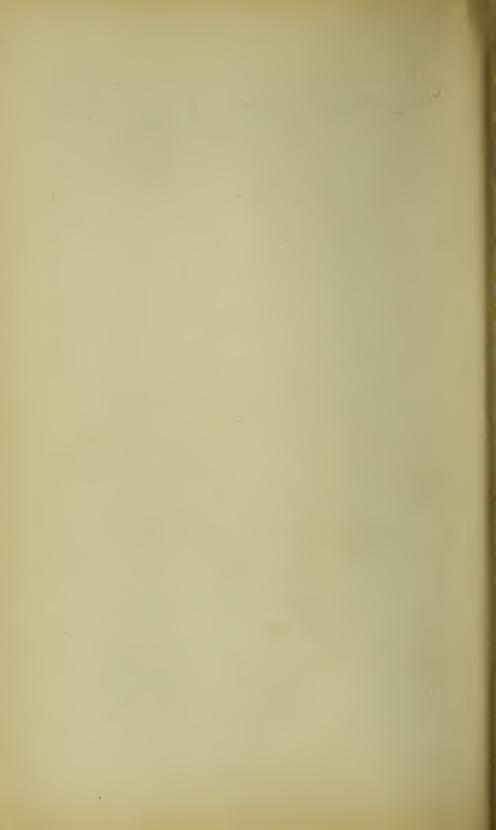
### For the Year.

Dec. 31, 1886	Balance on hand	·····	\$3,362 01
Dec. 31, 1887	Receipts:		
	For assessments	\$19,493 00	
	" interest on deposits	28 07	19,521 07
		-	\$22,883 08
Dec. 31, 1887	Disbursements:		
	To widow of Thomas Gray	\$1,000 00	
	" administratrix of Francis J. Quinn	1,000 00	
	" widow of Henry Campbell	1,000 00	
	" " Michael J. McAuliffe	1,000 00	
	" administratrix of Christopher Parks	1,000 00	
	" Edward Hogan	1,000 00	
	" widow of George Graney	1,000 00	
	" " Andrew McKelvey	1,000 00	
	" " William Wray	1,000 00	
	" administratrix of James O'Shaughnessy	1,000 00	
	" " James Rehill	1,000 00	
	" widow of James J. Giblin	1,000 00	
	" " Charles Morganroe	1,000 00	
	" " James McLane	1,000 00	
	" administratrix of Seaman Johnson, Jr	1,000 00	
	" executrix of John J. Murphy	1,000 00	
	" widow of William R. Ferris	1,000 00	
	" " Patrick Lynch	1,000 00	
	" "Timothy Flynn	1,000 00	
	" " James McManus	1,000 CO	20,000 0
Dec. 31, 1887	Balance	1	\$2,883 0

Very respectfully,

HENRY D. PURROY, RICHARD CROKER, Commissioners.

CARL JUSSEN,
Secretary.



### REPORT

OF THE

### FIRE DEPARTMENT

OF THE

### CITY OF NEW YORK

For the Three Months and Year ending December 31, 1888.

NEW YORK:
MARTIN B. BROWN, PRINTER AND STATIONER,
Nos. 49 and 51 Park Place.



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	27 00 30
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### Headquarters Fire Department, Nos. 157 and 159 East Sixty-seventh Street, Office Board of Commissioners, New York, February 13, 1889.

To the Hon. HUGH J. GRANT,

Mayor of New York:

SIR—We have the honor to submit herewith the report of the operations and actions of this Department for the quarter ending December 31, 1888, and for the year ending on the same date.

On May 11, Police Commissioner Fitz John Porter was appointed Fire Commissioner for the unexpired term ending. May 1, 1889.

Number of each Grade of Officers and Employees on December 31, 1888.

### Headquarters-

Commissioners	3
Secretary and Assistant Secretary	2
Medical Officers	3
Bookkeeper and Clerks	9
Typewriter and Stenographer	I
Janitor	I
Elevator Attendant	I
Watchmen	2
Machinist (Acting Engineer)	I
Stokers	3
Scrub Women	2

Bureau of Chief of Department—			
In Active Service—Uniform Force—			
Chief of Department	I		
Assistant Chief of Department and Sec-			
ond Assistant Chief of Department	2		
Chiefs of Battalion	12		
Foremen	80		
Assistant Foremen	85		
Engineers of Steamers	129		
First Grade 561			
Firemen { Second Grade 46			
Third Grade 109			
	716		
		1,025	
Ununiformed Force—			
Ununiformed Firemen (on probation)	3		
Pilots on Fire Steamers Marine	4		
Engineers on Fire Steamers Engines	2		
Stokers on Fire Steamers )43 and 51.	6		
		15	
	-		
Total active service		1,040	
Relieved from Service at Fires—			
Uniformed Force—			
Chief of Battalion	I		
Foremen	6.		
Assistant Foremen	4		
Engineers of Steamer	6		
Firemen	10		
Firemen, First Grade	22		
Private	I		
		50	
	-		1,09

Bureau of Inspector of Combustibles—		
Inspector of Combustibles	I	
Clerks	3	
Surveyors	2	
Oil Collectors	4	
		IO
Bureau of Fire Marshal—		
Fire Marshal	I	
Assistant to Fire Marshal	I	
Clerks	3	
<del></del>		5
Bureau of Inspection of Buildings—		
Superintendent of Buildings	I	
Deputy Superintendents of Buildings	2	
Clerks	23	
Inspectors of Buildings	45	
Messengers	3	
Driver	I	
Machinists to supervise elevators	4	
		79
Attorney to the Department		I
Fire-alarm Telegraph—		
Superintendent of Telegraph	I	
Chief Operator	I	
Operators	4	
Assistant Operators	5	
Clerk	I	
Inspectors of Alarm Boxes.	2	
Batteryman and Assistant Batteryman	2	
Foreman	I	
Linemen	_	
Linemen	2	19
Repair Shops-		- 9
Superintendent of Repairs to Buildings	I	
Foreman.	I	
Storekeeper	I	

Repair Shops—	
Clerks	
Shop Engineer	
Machinists 19	
Machinists' Helpers 5	
Boiler-maker 1	
Blacksmiths 7	
Blacksmiths' Helpers 3	
Wheelwrights 5	
Wheelwrights' Helper 1	
Harness-makers 2	
Harness-makers' Helper	
Hose Repairers 2	
Painters 6	
Watchmen	
Drivers 5	
Janitor 1	
Hospital Stables—	66
·	
Foreman	
Stablemen 5	6
Aggregate	1,304

Number of Changes by Resignation, Discharge, Death, Promotion, etc., in each Grade.

	Loss By							GAIN BY			Fires.
Grade.	Resignation.	Discharge.	Dismissal.	Promotion.	Death.	Dropped, etc.	Total.	Appointment.	Promotion.	Total.	Relieved From Service at F
Commissioner								ı		1	
Clerks	1						1	1	5	6	
Typewriter and Stenographer								ı		1	

				Loss	Вч			(	GAIN ]	Зұ	res.
Grade.	Resignation.	Discharge.	Dismissal.	Promotion.	Death.	Dropped, etc.	Total.	Appointment.	Promotion.	Total.	Relieved From Service at Fires.
Elevator Boy (or Attendant)				ı			r	1		ı	
Chief of Battalion									ı	ı	r
Foremen				ı	1		2		1	ı	1
Assistant Foremen				ı			1		1	1	2
Engineers of Steamer	ı			r	2		4		9	9	2
Firemen First Grade			9	5	8		22		46	46	8
" Second "	2		2	49			53		43	43	
" Third "	3		1	44			48		107	107	
Ununiformed Firemen	1		r	107			109	112		112	
Marine Engineers	r						r	1		ī	
Oil Surveyor					ı		ı				
Oil Collector								ı		I	
Fire Marshal	r						1	ı		I	
Inspectors of Buildings	3				ı		4	23		23	
Supervisors of Elevators								2		2	
Messenger	1			1			2				
Assistant Operator	ı						ı		3	3	
Linemen				r			ı				
Machinists	ı					2	3	7		7	
Machinists' Helper						2	2	3		3	
Blacksmith		1					1	3		3	
Blacksmiths' Helper						1	1	ı		I	
Wheelwright	2						2	r		1	
Painter								r		1	
Hose Repairer						r	ı				
Laborer						1	1				
Watchman				ı			ı				
Drivers				1			ı	1		τ	
Stablemen	1						I	1		ı	
Total	19	1	13	213	13	7	256	162	216	378	14

Additions and Amendments, etc., to the Rules and Regulations.

JANUARY 25, 1888.

(General Orders No. 1.)

The following rules in relation to the inspection of buildings by this Department are hereby prescribed and adopted:

I.—The Superintendent of Buildings is required to make reports of the operations and business transacted in his bureau as soon after the close of each quarter ending March 31, June 30, September 30, and December 31, as may be practicable, and to make immediate report in writing of all matters of extraordinary interest or importance requiring the attention or action of the Board.

II.—The Superintendent of Buildings shall be directly responsible to the Board of Commissioners for the proper conduct and management of his bureau. He is charged with the prompt execution and enforcement of all laws and ordinances, of all rules, regulations and orders of the Board of Fire Commissioners, general or special, so far as they are applicable to himself and his bureau, and with keeping an accurate record, in convenient form for reference, of the public business transacted therein.

III.—When the commanding officer at any fire shall report that the walls or any portion of the walls still standing are unsafe or liable to become unsafe, it shall be the duty of the Superintendent of Buildings to cause said walls to be immediately examined and to issue the necessary notices and directions in regard thereto.

IV.—The Deputy Superintendents of Buildings are charged with the same duties as the Superintendent of Buildings, during his absence, and with the performance of such work as the Superintendent may prescribe.

- V.—The following instructions for Inspectors must be strictly obeyed:
- I. They will report to the Superintendent of Buildings, or, in his absence, to the Deputy Superintendent in charge, at the office of the bureau, at 9 o'clock A. M. each day, except Sundays and legal holidays, prepared to hand in the reports of the operations of the previous day in their respective districts, and upon receiving such instructions as may be given them will immediately proceed to the various quarters of the engine and hook and ladder companies and thence to the performance of duty within their respective districts, or to such special duty as may be assigned them.
- 2. Immediately after leaving the office, and between the hours of 5 and 5.30 P. M. each day, except Saturdays and legal holidays, from March I to October 3I, both inclusive, and between the hours of 4 and 4.30 P. M., except Saturdays and legal holidays, from November I to February 28, both inclusive, they will report, for the purpose of receiving any instructions it may be necessary to communicate to them, at the quarters of the engine or hook and ladder companies which may be designated by the Superintendent of Buildings.
- 3. On Saturdays they will report at the above places at 12 o'clock.
- 4. Unless by permission no Inspector will leave his district during working hours.
- 5. Each Inspector is required to keep a journal, and to make a daily report, in each of which will be entered a list of the papers received and turned in, the time of leaving the office and the buildings visited each day, whether new buildings or buildings being altered, unsafe buildings or buildings requiring fire-escapes or proper means of exit. The time of visit and condition of the work must be noted in the journal and daily report, which must be signed by the Inspector. The time of reporting at the company quarters will be entered in the journal by the

house-watch over his signature, The daily report will be submitted to the Chief Clerk each morning for examination.

Books and blanks for the purpose will be furnished by the bureau, and will be the property of the Department, and must be surrendered by the inspector when leaving the Department.

- 6. Inspectors will make a report each Monday morning of every violation and unsafe building in their respective districts.
- 7. Inspectors are required to submit on the first day of each month a report, on the forms provided for that purpose, of such new buildings and alterations to buildings as have been commenced and completed during the preceding month.
- 8. Reports must be in writing on the forms provided by the Department, and be promptly presented at 9 o'clock A. M. Except where specially instructed, inspectors will not be permitted to write their reports in the office after that hour.
- 9. In cases of violations, the section of the law violated must be specified, and the language of the law quoted; and, as the forms are printed and easily understood, it is expected that there will be no necessity for returning them to the inspector for correction. No reports will be received unless properly made and written in ink. Any inspector who does not feel qualified to properly make a report of a violation, fire-escape or unsafe building, etc., will receive instructions upon application.
- 10. The inspectors will be provided with copies of the laws relating to the construction of buildings in this city, and it is expected that they will become thoroughly familiar with the provisions of the same.
- II. All buildings in process of erection or alteration in the respective districts must be examined daily to see if they are being erected or altered in conformity to the laws and according to the terms and conditions of the plans and specifications as submitted and approved.

- 12. Should the inspector find a building or buildings being erected or altered without permit, he will so report and prefer a complaint against the persons so violating the law. Buildings in which bad materials are used will be reported, and the inspector will state in his report how much, if any, of the wall or walls in which such materials were used, must be taken down.
- 13. Should the parties using bad materials fail to cause the removal of the same within twenty-four hours, they must be reported by the inspector for prosecution.
- 14. When an application for a permit to put additional stories on a building, or to otherwise alter a building, is referred to an inspector for examination, he will measure the height of the building, the thickness of the walls in each story, the condition of the foundation walls, of what built, and ascertain if the materials are of a good quality and in a good condition. The examination must include the nature of the ground on which the foundation walls are laid, and the kind of sand used in the mortar, and the report must state how the building is occupied.
- 15. All examinations of buildings, whether of party walls or buildings which it is proposed to repair or alter, and all examinations of theatres or other public buildings, etc., are to be promptly reported.
- 16. Inspectors are required to make diligent search for unsafe buildings. When any unsafe building comes under the notice of, or is referred to the inspector for investigation, he will make a full report thereon, giving the exact location of the building, name of owner and occupant, the purpose for which the building is used, and whether persons are living in it. The report will also state in what particular the building is unsafe, and what is necessary to make it safe, and if there is danger of the building falling before legal proceedings can be taken for its removal.

- 17. The inspectors will report all buildings which require fire-escapes. When report is made on any building requiring fire-escapes with balconies, the windows which are to open on the balconies, and the area and yard, if any, together with a diagram of the building, must also be submitted. They will, within three days after the completion of a fire-escape, make report thereof.
- 18. All cases in which the means of escape ordered are not provided within thirty days from the date of the memorandum thereof referred to the inspector must be returned by him for prosecution.
- 19. Inspectors will give notice that all iron beams, lintels, or girders spanning openings over eight feet and used for supporting a wall or walls, must be inspected, under the supervision of an inspector duly authorized by the Superintendent of Buildings before being used. All iron columns not cast with an open side or back must have three-eighths of an inch hole drilled in the shaft to determine the thickness of the castings.
- 20. The inspector, or inspectors, detailed for the purpose, will see that each piece is properly marked as to its capacity with the Department mark and date of approval. The use of any iron work as above specified on any building, unless the same be marked as above stated, is prohibited.
- 21. Inspectors are required to report what iron work is used on any and every building in their districts, and the weight which each piece is marked to sustain, so that it may be compared with the record in this office.
- 22. All complaints referred to the inspectors must be examined and reported on immediately on the forms provided for that purpose.
- 23. Inspectors will make separate monthly reports of unsafe cases and general violation cases on forms Nos. 18 and 34. They will hand in to the respective clerks the reports, etc., properly under their charge.

- 24. On stormy days the inspectors will be required to remain in the office, unless specially detailed on important business which admits of no delay, when they will be instructed in their duties, and how to perform them in the most effective manner.
- 25. Making false reports, or failing to comply with the regulations as above, on the part of any inspector, will be deemed sufficient ground for removal.

#### VI.—Instructions to supervisors of passenger elevators:

- I. Each elevator in the City of New York used for the conveyance of passengers shall be inspected at least once in every two months, and a report thereof made to the Superintendent of Buildings on the day following such inspection. The supervisor will state in said report the condition of the running gear, ropes, safety attachments, pulleys and all other parts of machinery applied to the use of said elevator, and should any repairs be found necessary to be made, the Superintendent of Buildings shall cause immediate notice thereof to be served as hereinafter provided.
- 2. Should any defects be found to exist in any part or parts of any passenger elevator, which would tend to impair the safety or endanger life by the continued use of such elevator, the supervisor of elevators shall inform the person in charge of the danger of continuing the use thereof, and the Superintendent of Buildings shall immediately cause a notice in writing to be served upon the owner or owners, lessee, manager, or any other person or persons having the use, control or management of said elevator, which notice may contain a statement of the repairs necessary to be made; and said elevator shall not again be used until a certificate in writing shall be issued by the Superintendent of Buildings that it has been put in safe running order and is fit for use. The notice herein provided for may be served upon the person having charge of the running of said elevator.

3. The following qualifications necessary for persons who now are or shall hereafter be placed in charge of running any passenger elevator in this city are hereby prescribed, and no person shall be employed for such purpose or engaged therein unless he possesses such qualifications:

He shall have a knowledge of the different parts of the machinery attached to or necessary in running such elevators and understand the application thereof.

He shall have at least one month's experience in running an elevator under the instruction of a competent person.

He shall be reliable, and of industrious and sober habits.

He shall not be less than eighteen years of age.

- 4. Whenever the Superintendent of Buildings shall become satisfied that the person engaged in running any passenger elevator is incompetent or disqualified from any cause to continue to run the same, the said Superintendent of Buildings shall forthwith notify the owner or the person managing or controlling the same, and the person so notified shall thereafter become responsible for the acts of said employee.
- 5. The supervisors will report all passenger elevator shafts not properly inclosed, and all passenger elevator cars requiring doors.

VII.—The following instructions for clerks shall be strictly observed:

I. The office work of the bureau shall be divided into four classes, viz.:

First Class.—Plans of New Buildings and Alterations to Buildings.

Second Class.—Violations, Fire-escapes and Passenger Elevators.

Third Class.—Unsafe Buildings.

Fourth Class.—Complaints.

Each class will be under the charge of a clerk, who will be held responsible for all books and papers placed in his care, and for proper observance of the rules, as hereinafter provided.

- 2. The clerk at the head of the first class shall have charge of all applications for erection of new buildings and alterations, etc., to buildings (including plans or drawings); reports of inspectors on the condition of structures, index books of new buildings and alterations to buildings; dockets of new buildings and alterations to buildings and blanks for use of persons applying for permits. He will see that all applications are ready for report by the inspectors, and will report monthly and quarterly to the Chief Clerk the number of applications of the several kinds approved, disapproved, amended and approved and pending, and of all buildings and alterations to buildings commenced, in progress, and completed.
- 3. The clerk at the head of the second class will have charge of all violations, fire-escape and passenger elevator cases, and the violation, fire-escape and passenger elevator books, and will be required to have the same written up. He will see that all notices for service in violation, fire-escape and elevator cases are properly made, and he will report monthly and quarterly to the Chief Clerk the number of violation, passenger elevator and fire-escape cases received, the number in which the laws have been complied with, the number forwarded to the Attorney for prosecution, and the number pending. He will also include in the monthly report the number of notices of the respective kinds prepared for service.
- 4. The clerk at the head of the third class will have charge of all unsafe building cases, and the unsafe index books and dockets, and will be required to have the same written up. He will receive all reports upon unsafe buildings, and prepare for service the necessary notices, and will report monthly and quarterly to the Chief Clerk all unsafe cases received, the number in which the law has been complied with, the number pend-

ing, the number in which surveys have been held, and the number of notices prepared for service. He will also prepare for the Board of Underwriters a list of all unsafe buildings reported during the month.

- 5. The clerk at the head of the fourth class will have charge of the complaints and complaint books, and will be required to have the same written up, and to have all complaints prepared for investigation by the inspectors. He will report monthly and quarterly to the Chief Clerk the number received, disposed of and pending.
- 6. The Chief Clerk will have charge of the office work, and shall be responsible for the proper care of the records of the bureau, and will see that applications for permits to build or alter are copied and docketed; and notices of violations, fire-escapes, unsafe buildings, etc., are prepared for service. He will have charge of the clerks and messengers and assign them to their various duties, and will keep a record of all absences of employees and make report thereof to the Superintendent. He shall act as Clerk to the Board of Examiners, as provided by section 31, chapter 456, Laws of 1885, and shall prepare a report of the operations of the bureau each quarter for transmittal to the Board of Commissioners on or before the 5th day of January, April, July and October.
- 7. It is expected that the work of the several classes will be completed at the close of office hours each day, so far as the same is practicable.
- 8. All notices must be entered in the note-book and be delivered for service to the Chief Clerk before 9.15 A. M.
- 9. Notices made out before 3 o'clock each day will be of even date. Notices made out after 3 o'clock P. M. will be dated as of the following day.
- 10. All plans, reports, complaints, etc., received by the clerks in charge must be stamped with the date of receipt at the office.

- 11. All books and papers must be returned to their proper places after use. Official papers will in no case be retained by the clerks or kept in the desks after office hours.
- 12. Official papers must not be taken from the office without permission.
- VIII.—All notices of violation of law and such other notices as may be necessary shall be served by the messengers or any employee of the Bureau of Inspection of Buildings in a careful, exact and proper manner, and the proper returns of service of such notices shall be made immediately thereafter.
- IX.—The following instructions for making service of notices from the Bureau of Inspection of Buildings must be strictly observed:
- I. Find the person addressed in the notice; inquire if he or she is interested in the property as stated, and, if so interested, serve the notice upon the person by delivering it to and leaving it with that person.
- 2. Do not leave the notice with any other person than the person addressed.
- 3. If there is any error as to ownership, lesseeship, executorship, etc., in the notice, return it with a memorandum of the correction required.
- 4. In the event of failure to find the person or persons addressed in the notice as owner or owners, after making diligent search and inquiry, post the notice in a conspicuous place on the premises described therein.
- 5. Make affidavit of service of notice, stating manner, time and place of such service, or, in the event of failure to find the person or persons addressed, the particulars of the search and inquiry made, and the posting of the notice on the premises

described. The affidavit must be in the following form when the notice is served personally, viz.:

#### SERVICE OF NOTICE.

Violation, Unsafe Building, Fire Escape, Unsafe Elevator,	Record No(Insert number).
City and County of New York, ss.	
being duly sworn, says that he is. Bureau of Inspection of Buildings Fire Department of the City of authorized to serve the within notic of	(as the case may be), in the New York, and was duly ce; that on the
Subscribed and sworn to before me thisday of188 ,	e, }
Notary Publi	c, New York County.

6. The affidavit must be in the following form when the notice is served by posting the notice upon the premises, viz.:

#### SERVICE OF NOTICE.

Violation, Unsafe Building, Fire Escape, Unsafe Elevator,
City and County of New York, ss. :
sworn, says that he is
Subscribed and sworn to before me, thisday of188,
Notary Public, New York County.

- 7. If the notice to be served is for the survey of an unsafe building (as provided in section 34 of chapter 566 of the Laws of 1887), service must be made in the manner heretofore prescribed at least twenty-four hours before, but not more than three days before the time fixed in said notice for such survey.
- 8. If a firm is addressed in a notice, personal service upon one member thereof is sufficient. In serving a firm or partnership ascertain the names of the persons composing the firm, and state in the affidavit of service the name of the particular person served.

- 9. Where the party addressed is a corporation, the notice must be served upon an officer thereof.
- 10. In serving corporations be particular to insert the name and title of the person served in the affidavit of the service.
- 11. All reports and returns of service of notices, etc., herein required, shall be forwarded direct to the Superintendent of Buildings.
- X.—The following from the general rules to govern the conduct of the Department officers are republished for the information and guidance of the officers and employees of the Bureau of Inspection of Buildings:
- I. All official communications or communications in any manner relating to the official business of the Department, from either of the heads of bureaus, or superintendents or their subordinates, addressed to any national, state or municipal department, bureau or official, or to any unofficial corporation or person, whether verbal or written, shall be made through the office of the Board, unless otherwise specially directed by the President or the Board.
- 2. While in the service of this Department, its officers and subordinates shall not make use of or apply any portion of the time they may be required to devote to the performance of the duties devolved upon them, or any information they may have acquired therein, or any authority or power with which they may be clothed, in or for the furtherance of any private or corporate interests or purposes whatever.
- 3. Office hours at Headquarters shall be from 9 A. M. to 4 P. M., except Saturdays, when they shall be from 9 A. M. to 12 M., and on Sundays and legal holidays, when the offices (with the exception of the Telegraph office, which shall be open at all times) shall be closed for business. The office hours of the several bureaus, offices, etc., may, however, at any time be extended for the transaction of public business, if, in the opin-

ion of the Board of Commissioners, or of the officers in charge of the same, the interests of the public service shall require it.

- 4. All clerks must be at their desks and ready to begin the work of the day promptly at the beginning of the office hours, and punctually at the expiration of the noon-day meal hour, unless otherwise specially directed or excused by competent authority; and when any work they may have been directed to do is finished, it shall be their duty to report that fact at once to their immediate superior.
- 5. It is made the duty of all employees, in case of physical or other disability preventing their prompt appearance for duty at the required time, to report that fact to their immediate superiors in time to enable the substitution of another to perform their duties if necessary, and in order that in case of physical disability the Medical Officer may be promptly notified thereof.
- 6. One hour shall be allowed to each employee for noon-day luncheon or dinner by his immediate superior, in such manner as shall not interfere with the business of the office.
- 7. It shall be the duty of each employee to report before leaving, either before, at, or after the close of the regular office hours each day, to his immediate superior, or in the event of his absence, to the \* \* \* person in charge \* \* \*
- 8. Smoking, sleeping, or dozing while on duty, during the regular office hours, is strictly prohibited, as well as the reading of newspapers, books, etc., by clerks, unless the same be in connection with the public business, or by special permission.
- 9. Interference in any manner by any employee with the duties of, or the performance of the same by another, or ungentlemanly conduct or language, or loud, boisterous or unnecessary conversation, remarks or noise, by employees in any of the offices at any time, is prohibited.
- 10. The public business transacted in and the records of the several bureaus and offices shall be treated as strictly confidential by the several officers and employees of the Department,

and shall not be communicated except as may be directed by the Board or the President.

- 11. No one except the Secretary and the persons employed therein shall be admitted within the inclosures surrounding the desks in the several bureaus or offices unless specially permitted by the officers in charge of the same.
- 12. Absence without leave, tardiness, neglect of duty, insubordinate conduct, disobedience of orders or directions, inattention to duty, intoxication, ungentlemanly conduct or language, incompetency, or violations or infractions of any of the rules prescribed, on the part of either of the employees, shall constitute good and sufficient ground for charges against the offender or delinquent by his immediate superior; and, if such charges are sustained, the penalty shall be reprimand, transfer, suspension from pay and duty, or dismissal, as the Commissioners may determine.
- 13. Failure on the part of an employee, against whom charges may have been preferred, to present himself upon twenty-four hours' notice thereof shall, in the absence of evidence of physical or other sufficient disability to attend at the time specified in such notice, and presented prior thereto, be held to be equivalent to a plea of guilty by the accused to the charges preferred against him.
- 14. Heads of bureaus, superintendents, etc., shall prescribe all necessary rules for the government of the employees under their control and direction not herein contained.
- 15. Nothing contained in these rules shall preclude the Commissioners, the Secretary or either of the heads of bureaus, or Superintendent, from at any time requiring any or either of the employees of the Department serving under their directions, to perform such other duties (not herein specially prescribed for them) as the interest of the Department service may, in their opinion, demand or require.

XI.—A copy of this order, properly attested and addressed, will be served by the Superintendent of Buildings upon each of his subordinates as soon as received.

XII.—General Order No. 15, O. B. C., series of 1884, is hereby countermanded.

AUGUST 22, 1888.

(General Orders No. 2.)

The following rule adopted by the Board on this date is hereby promulgated:

It shall be the duty of every officer or employee of the Department upon observing, or in any manner becoming cognizant of any matter or information in any manner affecting the official duties or interests of any bureau, branch, or office of the Department, to make immediate report thereof to the head of such bureau, branch or office.

August 30, 1888.

(Circular No. 3.)

At the present time, the Board of Fire Commissioners desire to call the especial attention of the members of the ununiformed force to section 21, paragraph V, General Orders No. 13, O. B. C., series of 1881, and to notify both officers and men that the rule will be strictly enforced.

The rule referred to is as follows:

21. Not to be a delegate or representative to, or a member of, any political or partisan convention whose purpose is the nomination of a candidate for any political office.

Directions were also given not to permit absence from duty on election day, except for the most urgent reasons.

## Appropriations (including Transfers) and Expenditures.

Title of Appropriation.	AMOUNT OF APPROPRIATION.	Expenditures.	BALANCE.
For Salaries—			
Headquarters	\$50,630 00	\$50,628 43	\$I 57
Bureau Chief of Department	1,313,437 CO	1,300,879 45	12,557 55
" Inspector of Combustibles	12,200 00	12,167 62	32 33
" Fire Marshal	6,001 00	6,000 80	20
" Inspection of Buildings	98,900 00	97,651 40	1,248 €0
Attorney	4,000 00	4,000 00	
Fire Alarm Telegraph	23,765 00	23,510 50	254 50
Repair Shops	60,000 00	59,999 46	54
Hospital Stables	5,160 00	5,112 65	47 35
Total salaries	\$1,574,093 00	\$1,559,950 31	\$14,142 6)
For Apparatus, Supplies, etc	\$313,899 co	\$313,899 00	
For New houses for Hook and Ladder Co. No. 1 14 and in West Eighty-third street	38,500 00	38,500 00	
For placing fire-alarm electrical conductors underground	50,000 00	50,000 00	
Total apparatus, etc	\$402,399 00	\$402,399 00	
Grand total	\$1,976,492 00	\$1,962,349 31	\$14,142 E9

Of the expenditures, the following amounts were, under contracts, awarded upon proposals advertised for as provided by law:

## Apparatus, supplies, etc.—

For forage	\$36,135 00
For fuel	20,400 00
For new fire-engines	8,950 00
For new hose	29,120 00
For new trucks	6,800 00
For repairing fire-engines	5,600 00
For repairing fire-boat "Wm. F. Havemeyer"	11,000 00
For chartering steamboat "John Fuller"	3,900 00

Apparatus, supplies, etc.—		
For new tenders	\$1,690	00
For alteration of building No. 155 Mercer		
street	1,190	00
Total	\$124,785	00
For placing fire-alarm telegraph electrical con-		
ductors underground  For new houses in West Eighty-third street and	47,717	25
Hook and Ladder Co. No. 14	36,648	00
Grand total	\$209,150	25
Amount of Bills and Pay-rolls Audito	ed.	
Bills for 1886	\$100	00
" 1887	44,969	
" 1888	321,426	
Total bills	\$366,496	00
Pay-rolls for 1888	1,559,950	31
Total bills and pay-rolls\$	51,926,446	31

#### BUREAU CHIEF OF DEPARTMENT.

Company Organization, Complement of Officers and Men, Kind and Number of Apparatus, Number of Horses, Number of Alarms Responded to, etc.

	1	Men.		Арран	RATÚS.			d to.	ormed Duty at.	
Company.		No. of Officers and Men.	No. of Steam Fire Engines.	No. of Four- wheel Tenders. (2 horses each.)	No. of Two- wheel Tenders. (1 horse each.)	No. of Hook and Ladder Trucks. (2 horses each.)	Total No. of Horses.	No. of Alarms Responded to.	No. of Fires Performed Duty	Remarks.
Engine	1	12	I	ı			4	196	81	Engine occasionally has 3 horses.
66	2	12	I		I		3	126	49	
6.6	3	12	I	I			4	90	27	
6.6	4	12	I	,	1		3	128	67	
66	5	18	2	I	1		7	162	43	Double company.
"	6	12	1		I		3	99	38	
6.6	7 · · · · · · · · ·	16	1		I		5	176	50	Water Tower, 2 horses.
"	8	12	I	ı			4	193	45	
6.6	9	12	1	1			5	265	80	Engine occasionally has 3 horses.
66	10	12	I	ı			4	59	28	
66	11	12	I	1			4	193	67	
6.6	12	18	2		2		6	196	74	Double company.
6.6	13	18	2		2		6	188	63	Double company.
6.6	14	12	I	I			4	173	89	
6.6	15	Т2	ı	1		3	4	232	69	
66	16	18	2	I	I		7	170	48	Double company.
"	17	12	I		1		3	290	92	
"	18	18	2	1	1		7	133	44	Double company.
66	19	12	I	I			4	122	35	
"	20	12	ı		ı		3	204	57	
"	21	12	I	1			4	165	59	
"	22	12	I	I			4	141	40	
44	23	12	1	1			4	110	46	
66	24	12	ı	ı			4	102	38	
66	25	12	ı		ı		3	158	40	
66	26	18	2	ı	ı		7	227	83	Double company.
6.6	27	18	2	1	ı		7	133	49	Double company.

-		Jen.		Арра	RATUS.			d to.	ormed Duty at.	
	COMPANY.		of Steam Fire Engines.	of Four- wheel Tenders. horses each.)	of Two- wheel Tenders.	Ladder Trucks.	Total No. of Horses.	arms Responded to.	No. of Fires Performed Duty a	Remarks.
		No. of Officers and Men.	No. of Steam Fire Engine (2 horses each.	No. of Four- wheel Tende (2 horses each.	No. of Two- wheel Tender (1 horse each.)	No. of Hook and Ladder Trucks (2 horses each.)	Total No.	No. of Alarms Res	No. of Fir	
Engin	ie 28	12	I	ı			4	125	25	
66	29	12	1		1		3	119	59	
"	30	12	I	ı			4	139	57	
"	31	18	2		2		6	159	53	Double company.
66	32	12	ı		ı		3	101	57	
	33	18	2		2		6	145	59	Double company.
6.	34	12	ı	I			4	160	57	
6.6	35	12	I		1		3	165	52	
6.6	36	12	ı	I			4	159	45	
6.5	37 · · · · · · · ·	1.4	4 E	ı			4	86	22	Training stable.
6.6	38	12	1	ı		ı	5	45	14	Four-wheeled tender has I horse.
4.	39	12	ı	ı			4	164	43	(
6.6	40	8	ı	ı			4	60	23	
6.6	41	8	ı		r		3	47	25	
6.6	42	8	1	1			4	43	12	
4.6	43	10						8 r	9	Floating engine.
4.6	44	12	ı	ı			4	173	36	
44	45	8	ı	ı			4	12	7	
4.6	46	8	ı	ı			4	15	10	
6.6	47	12	ı	1		1	6	46	14	
4.6	48	12	ı	1		ı	6	13	5	
**	49	10	ı		1	ı	5			
"	50	12	ı	ı		1	6	47	20	
6.6	51	10						99	9	Floating engine.
	52	12	ı	ı		ı	6	5	4	
"	53	12	ı	ı			4	164	38	
4.6	54	12	ı		1		3	165	58	
*	55	12	r		1		3	91	39	
Hook	and Ladder 1	12				ı	3	262	183	Truck has 3 horses.
	" 2	12	(			ı	2	321	147	
	" 3…	16				I	5	241	154	Water Tower with 2 horses, Truck has 3 horses.

Company.		No. of Officers and Men.	No. of Steam Fire Engines. (2 horses each.)	No. of Four- wheel Tenders.	No. of Two- wheel Tenders, (r horse each.)	No. of Hook and Ladder Trucks. (2 horses each.)	Total No. of Horses.	No. of Alarms Responded to.	No. of Fires Performed Duty at.	Remarks.	
Hook and Ladd	ler 4	12				ı	3	265	170	Truck has 3 horses.	
"	5	18				2	4	189	102	Double company.	
"	6	12				1	3	320	211	Truck has 3 horses.	
"	7	1,5	•			ı	2	257	148		
66	8	12				1	3	230	127	Truck has 3 horses.	
66	9	19				2	5	255	147	{ Double company, one truck has 3 horses.	
66	10	12				I	3	178	131	Truck has 3 horses.	
4.6	11	12				I	3	205	103	Truck has 3 horses.	
66	12	12				I	3	285	150	Truck has 3 horses.	
6.6	13	13				ı	2	176	90		
6.6	14	12				ı	2	174	101		
46	15	12			٠	I	4	97	69	Supply w gon with 2 horses.	
66	16	12				I	3	200	109	Truck has 3 horses.	
66	17	10				ı	2	103	46		
66	18	12				ı	3	298	187	Truck has 3 horses.	
"	19	8	-	ı		ı	4	21	16		
Total		934	62	36	27	27	294				

Average number of alarms responded to by each company, 150. Average number of fires at which each company performed duty, 64.

The companies are organized into twelve battalions, consisting of from five to nine companies, each commanded by a Chief of Battalion; the Assistant Chief of Department commands the First, Second Third, Fourth, Fifth and Sixth Battalions, and the Second Assistant Chief of Department commands the Seventh, Eighth, Ninth, Tenth, Eleventh and Twelfth Battalions; the entire force is commanded by the Chief of Department.

Register of Officers of the Uniformed Force in Active Service on December 31.

N		ORIGINAL APTOI	NTMENT.	PROMOTION.			
N AME.	Age.	Grade.	Date.	Grades.	Dates.		
Chief of Department. Shay, Charles O	30	Foreman	Sept. 25, 1865	District Engineer Assistant Chief of Department Chief of Department	June 1, 1859 May 19, 1873 May 1, 1884		
Assistant Chief of Department.  Bonner, Hugh	27	Foreman	Sept. 18, 1865	Chief of Battalion  2d Assistant Chief of Department  Assistant Chief of Department	3 - ,, 5		
Second Assistant Chief of Department. McCabe, John	26	a Fireman	Sept. 25, 1866  July 1, 1873	Assistant Foreman. Foreman Chief of Battalion. b 2d Assistant Chief	Dec. 1, 1873 July 1, 1874 May 15, 1881		
Chiefs of Battalion.  1. Gicquel, Benj. A	24	Fireman	Oct. 16, 1855	Assistant Foreman. Foreman. District Engineer	May 1, 1884 Jan. 22, 1866 June 1, 1866 July 1, 1871		
2. Rowe, William	24	Foreman	Oct. 20, 1865	Chief of Battalion	May 21, 1873		
3. Fisher, John S	34	Fireman	Jan. 9, 1868	Assistant Foreman. Foreman Chief of Battalion	July 15, 1860		
4. Campbell, Samuel.	25	Fireman	Oct. 16, 1865	Assistant Foreman. Foreman Chief of Battalion	Feb. 1, 1873		
5. Reilly, Francis J	22	Fireman	Sept. 27, 1865	Assistant Foreman.  Foreman.  Chief of Battalian.  d 2d Assistant Chief of Department	July 1, 1871 May 1, 1872 June 6, 1872 Feb. 1, 1880		
6. Bresnan, John ∫	22	Fireman	Oct. 20, 1865	Assistant Engineer of Steamer Assistant Foreman Chief of Battalion	Mar. 16, 1871 July 1, 1871 Mar. 1, 1872		
7. Reeves, Michael F.	27	Fireman	Apr. 16, 1867	Assistant Foreman, Foreman Chief of Battalion	Oct. 15, 1870 Aug. 1, 1871 Nov. 1, 1881		
8. Lally, Thomas	22	Fireman	Aug. 15, 1870	Assistant Foreman. Foreman Chief of Battalion	Apr. 21, 1873 Nov. 1, 1881		
9. Purroy, Ch rlcs D	24	Private	Jan. 22, 1880	Fi: eman	Apr. 1, 1830 Apr. 5, 1881 D : 31, 1882		

a Resigned, November 12, 1867. b Dismissed, July 21, 1885, and reinstated by court, July 1, 1887. c Reduced to Fireman, April 1, 1872. d Reassigned as Chief of Battalion, July 1, 1887.

N		ORIGINAL AFPOI	NTMENT.	PROMOTION.			
NAME.	Age.	Grade.	Date.	Grades.	Dates.		
10. McGill, Joseph F	23	Fireman	Mar. 21, 1866	Assistant Foreman. Foreman Chief of Battalion	Apr. 1, 1870 Oct. 1, 1872 Aug. 12, 1884		
11. Cashman, John J	22	Fireman	Oct. 17, 1866	Assistant Foreman. Foreman Chief of Battalion	Feb. 15, 1872 Apr. 27, 1879 Aug. 4, 1880		
12. Kehoe, John H	23	Fireman	Oct. 20, 1865	Assistant Foreman. Foreman Chief of Battalion	June 15, 1869 Dec. 1, 1859 Dec. 23, 1888		
Foremen.							
1. Poynton, Joseph	26	Foreman	Sept. 8, 1865				
2. Spence, Arnot	31	Foreman	Oct. 20, 1865				
3. McNeill, Alex	29	Assistant Foreman	Oct. 16, 1865	Foreman	June 1, 1868		
4. Donohue, Patrick.	20	Fireman	Sept. 27, 1855	{Assistant Foreman. Foreman	June 1, 1868 Feb. 1, 1869		
5. Best, Samuel	32	Fireman	June 14, 1866	{Assistant Foreman. Foreman	Apr. 17, 1867 Mar. 1, 1869		
6. Shaw, William	27	Assistant Foreman	Oct. 2, 1865	Foreman	May 1, 1869		
7. McCormick, Jas. }	27	Fireman	Oct. 6, 1865	{Assistant Foreman. Foreman	June 23, 1868 June 15, 1869		
8. Castles, John	27	Fireman	July 27, 1866	{Assistant Foreman. Foreman	Apr. 1, 1869 July 15, 1869		
9. McLaughlin, Wm.	29	Fireman	May 22, 1868	Assistant Foreman.	June 1, 1869 Mar. 1, 1870		
10. Erb, George W	23	Fireman	Oct. 11, 1865	{Assistant Foreman. Foreman	Feb. 1, 1869 July 25, 1870		
11. Hayes, William F.	27	Fireman	July 31, 1865 Apr. 1, 1866	Assistant Foreman.	Oct. 1, 1869 Oct. 15, 1870		
12. Landers, Wm. H	41	Fireman	Sept. 29, 1865	{Assistant Foreman. Foreman	Nov. 17, 1865 Dec. 24, 1870		
13. Wolff, Charles A.	33	Firemnn	Mar. 21, 1866	Assistant Foreman.	Aug. 1, 1870 July 1, 1871		
14. Meagher, Daniel J.	23	Fireman	Oct. 6, 1865	{Assistant Foreman. Foreman	Dec. 24, 1870 Nov. 1, 1871		
15. Vetter, Peter, Jr.	26	Fireman	Oct. 27, 1865	{Assistant Foreman. Foreman	June 1, 1868 May 1, 1872		
16. Cowie, John A	30	Assistant Foreman	Sept. 14, 1865	Foreman	Mar. 1, 1873		
17. Jones, Henry M	27	Assistant Foreman	Sept. 27, 1865	Foreman	Mar. 1, 1873		
18. Ward, John	26	Fireman	Sept. 25, 1865	{Assistant Foreman. Fereman	Jan. 1, 1870 Mar. 1, 1873		
19. Sattler, John	29	Fireman	Oct. 20, 1865	Assistant Foreman.	July 1, 1871 Mar. 1, 1873		

**		ORIGINAL APPOI	NTMENT.	PROMOTION.			
Name.	Age.	Grade.	Date.	Grades.	Dates.		
20. Sheridan, Philip	23	Fireman	Oct. 20, 1865	Assistant Foreman.	July 1, 1871 June 16, 1873		
21. Connor, David	25	Fireman	July 31, 1865	{Assistant Foreman. Foreman	Nov. 1, 1871 June 16, 1873		
22. Welsh, John	23	Fireman	Oct. 11, 1865	Engineer of Steamer Assistant Foreman. Foreman	Aug. 1, 1866 Feb. 15, 1872 June 16, 1873		
23. Chambers, Chas	31	{Engineer of Steamer}	Sept. 14, 1865	Assistant Foreman.	July 1, 1873 Dec. 1, 1373		
24. Perley, Hamilton F	21	{Ass't Engineer} of Steamer.}	Mar. 15, 1873	{Assistant Foreman. Foreman	Jan. 15, 1874 Aug. 1, 1874		
25. Judge, Thomas	32	Fireman	June 28, 1866	{Assistant Foreman. Foreman	Oct. 18, 1872 Dec. 21, 1874		
26. Monroe, James H.	29	Fireman	Oct. 16, 1855	Foreman	Apr. 17, 1867 July 1, 1871 May 21, 1873 Feb. 15, 1875		
27. Van Hora, Thos. J.	26	Fireman	May 6, 1871	{Assistant Foreman. Foreman	Jan. 15, 1874 Mar. 1, 1875		
28. Hamblett, Roger B	21	Fireman	Sept. 11, 1865	(Assistant Foreman. Foreman	June 1, 1869 Mar. 1, 1875		
29. Kittson, Hugh	23	Fireman	Sept. 25, 1365	Assistant Foreman.	July 1, 1873 Mar. 1, 1875		
30. Eagan, John J	25	Fireman	Sept. 11, 1835	{Assistant Foreman. Foreman	Oct. 15, 1870 Aug. 20, 1875		
31. Fisher, Isaac	22	g Engineer of Steamer Ass't Engineer of Steamer.	Oct. 1, 1859 Nov. 1, 1872	Engineer of Steamer Assistant Foreman. Foreman	July 1, 1873 Apr. 15, 1874 Dec. 2, 1875		
32. Wray, Robe t	23	Fireman	Oct. 16, 1855	Assistant Engineer of Steamer	June 1, 1871 Sept. 1, 1874 Mar. 12, 1877		
33. Bradley, Daniel	30	Fireman	Mar. 1, 1866	{Assistant Foreman . Foreman	Mar. 1, 1873 Apr. 3, 1878		
34. Bermingham, Wm	34	Fireman	Dec. 15, 1873	{Assistant Foreman. Foreman	Oct. 1, 1875 Dec. 8, 1879		
35. Farrell, Robert R	25	(h Ass't Engin'r) of Steamer Ass't Engineer)	Nov. 1, 1871	(Assistant Foreman.	Jan. 15, 1874		
		of Steamer	Mar. 15, 1873	(Foreman	Feb. 1, 1880		
3% Fleming, Wm. H	23	Fireman	Oct. 17, 1870	Assistant Foreman.	Aug. 2, 1877 Mar. 17, 1880		
37. Shay, Charles H .	21	Private	Nov. 21, 1877	Fireman Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman. Foreman	Apr. 1, 1878 Apr. 1, 1878 Apr. 4, 1879 Dec. 10, 1879 June 1, 1880		

f Reduced to Foreman, February 15, 1875. h Resigned, May 21, 1872.

NT		ORIG.NAL APPOIN	TMENT.	Ркомотю	N
Name.	Age.	Grade.	Date.	Grades.	Dates.
8. Perley, Charles H.	22	Private	Jan. 17, 1879	{ Assis ant Foreman. { Foreman	Feb. 1, 187 Aug. 25, 188
39. O'Brien, Edward.	25	Fireman	July 1, 1869	{Assistant Foreman. {Foreman	Mar. 1, 187 Sept. 17, 188
μο. B.own, Wm. W	23	Fireman	June 14, 1866	{Assistant Foreman. Foreman	Dec. 1, 187 Apr. 1, 188
r. Byrne, Joseph P	28	Fireman	Oct. 1, 1871	Assistant Foreman.	May 1, 187 July 1, 188
12. Duane, William	28	Fireman	Aug. 8, 1868	(Assistant Foreman) Foreman	July 20, 18 Nov. 1, 18
43. Colby, William J	30	Fireman	July 7, 1875	{Assistant Foreman. Foreman	June 1, 18 Nov. 1, 18
4. Searle, George S	21	Fireman	Nov. 15, 1874	Assistant Foreman.	July 22, 18 Nov. 18, 18
5. Shaw, Joseph	28	i Engineer of Steamer Ass't Engineer of Steamer.	Oct. 13, 1865 Feb. 1, 1874	Engineer of Steamer Assistant Foreman.	Mar. 15, 18 Aug. 8, 18 Dec. 31, 18
.6. Cusick, George	24	Fireman	Apr. 21, 1869	Assistant Foreman.	May 15, 18 Apr. 18, 18
7. Short, Peter H	25	Fireman	May 1, 1875	Assistant Forem.n. Foreman Chief of Battalion. j Foreman	Apr. 18, 18 Aug. 4, 18
8. McAdams, Hy. W.	23	Fireman	Sept. 18, 1874	{Assistant Fo eman. Foreman	Nov. 1, 1' May 23, 18
9. Gleason, Luke	25	& Fireman	Jan. 1, 1869 Dec. 1, 1872	{ Assistant Foreman. Foreman	Apr. 8, 18
o. Murray, Henry	2;	{ Fireman	Oct. 13, 1855 Dec. 17, 1874	{Assistant Foreman. Foreman	Oct. 1, 18 Jan. 15, 18
I. Gooderson,Frederick W., Jr.	23	Private	Oct. 13, 1879	Assistant Engineer of Steamer Assistant Foreman	
2. McCutchen, James	31	Fireman	Sept. 18, 1865	{Assistant Foreman	Mar. 1, 18 May 20, 18
3. Hart, Michael	28	Fireman	Oct. 20, 1865	{Assistant Foreman. Foreman	July 1, 18 May 20, 18
4. Connolly,Patrick J.	28	Fireman	Jan. 15, 1873	{Assistant Foreman. Foreman	Nov. 16, 18 May 20, 18
5. McCabe, Hugh D.	25	Private	Feb. 9, 1832	{Assistant Foreman. Foreman	July 22, 18 May 20, 18
6. Shea, Joseph	29	Foreman	May 27, 1884		
57. Cosgrove, James	12	Pri /ate	Jan. 1, 1878	Assistant Engineer of Steamer Assistant Foreman. Foreman	Mar. 21, 18 July 1, 18

i Resigned, October 16, 1871.
j Reassigned as Foreman, July 1, 1887.

k Resigned, June 1, 1872. l Resigned, March 31, 1869.

		ORIGINAL APPOI	NTMENT.	Ркомотіо	N.
Name.	Age.	Grade.	Date.	Grades.	Dates.
58 Falvey, John	21	Fireman	Mar. 11, 1871 July 18, 1874	m Assistant Foreman { Assistant Foreman { Foreman	
9. McDonald, Alex	28	n Fireman	July 31, 1865 June 12, 1873	Assistant Foreman.	Jan. 7, 187 Aug. 7, 188
oo. Scannell, Edw. A.	24	Private	Apr. 7, 1881	{ Assistant Foreman } Foreman	May 20, 188 Aug. 16, 188
i. Binns, John	25	Private	Mar. 22, 1883	{ Assistant Foreman. Foreman	May 20, 188 Aug. 16, 138
52. Golden, John J	30	Fireman	Dec. 18, 1874	{Assistant Foreman. Foreman	Feb. 1, 188 Aug. 22, 188
53. Barry, James	23	{ Hoseman Fireman	Jun. 20, 1871 Feb. 12, 1876	{ Assistant Foreman. { Foreman	May 20, 188 Aug. 22, 188
54. Sullivan, Thomas.	26	Sp Dist. Engineer. Foreman	Sept. 6, 1865 Aug. 23, 1884	***************************************	
55. Kenny, Thomas A	29	Fireman	Aug. 4, 1876	{Assistant Foreman. Foreman	July 10, 187 Feb. 1, 188
66. Lawler, Daniel	24	Fireman	May 1, 1875	{Assist n' Foreman. {Foreman	
57. Callaghan, Dnl. H.	26	Fireman	Mar. 1, 1873	{Assistant Foreman. Foreman	July 10, 187 June 25, 188
88. Cook, Martin	23	Hoseman	Jan. 1, 1870	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman.  g Foreman Foreman	July 24, 18; Jan. 13, 18; Jan. 15, 18; Mar. 1, 18; Nov.15, 188
69. Teal, Henry	21	Fireman	Aug. 1, 1871	{ Assistant Foreman. { Foreman	Sept. 22, 188 Nov. 15, 188
o. Cooney, John J	29	Private, 3d Grade	Sept. 1, 1882	Assistan Engineer of Steamer	June 6, 188 July 1, 188 Nov. 15, 188
rt. Ahearn, Thomas J	23	Fireman	May 9, 1873	{Assistant Foreman. Foreman	Apr. 1, 188 Feb. 25, 188
2. White, John H	30	Fireman	Jan. 2, 1875	Assistant Foreman.	Feb. 1, 188 Feb. 25, 188
3. Fraser, William D.	24	Fireman	July 3, 1872	{Assistant Foreman. Foreman	May 20, 138 D.c. 1, 188
4. Croker, Edward F	21	Private	June 22, 1884	(Assistant Foreman. (Foreman	Aug. 16, 188 Feb. 25, 188
5. McNamara, Mich.J	25	Fireman	Apr. 21, 1873	Assistant Foreman.	Aug. 27, 188 Dec. 1, 188
6. Nugent, James M.	24	Private	Jan. 4 1384	Assistant Foreman.	July 1, 188

m Dismissed, June 19, 1874.

n Resigned, June 8, 1872

n Resigned, July 1, 1875

n Resigned, June 8, 1872

n Resigned, June 19, 1875

		ORIGINAL APPOIN	NTMENT.	Ркомотю	N
Name.	Age.	Grade.	Date.	Grades.	Dates.
77. O'Hears, Thomas.	29	Fireman	June 12, 1875	{ Assistant Foreman. Forem n	July 1, 1883 Feb. 1, 1887
78. Siegmann, Louis L.	2.1	Fireman	Feb. 8, 1871	{Assistant Foreman	Jan 15, 1874 Mar. 1, 1887
79. McAvoy, Michae'.	25	Fireman	Dec. 1, 1865	{ Assistant Foreman. Foreman.	Dec. 31, 1882 May 6, 1887
80. Quirk, William	27	Private	May 19, 1881	{Assistant Foreman. Foreman	May 20, 1884 Sept. 1, 1888
Assistant Foremen.					
1. Schuck, Henry	33	Fireman	Sept. 18, 1865	Assistant Foreman.	Nov.22, 1865
2. Smith, Edward S.	23	Fireman	Sept. 11, 1865	Assistant Foreman.	Dec. 15, 1868
3. Hicks, Matthew	21	Fireman	Aug. 10, 1868	Assistant Foreman.	Oct. 15, 1870
4. Riordan, John	21	Fireman	Sept. 20, 1866	Assistant Foreman.	Nov. 1, 1871
5. Lynar, Andrew	28	Fireman	Jan. 21, 1868	Assistant Foreman.	Feb. 15, 1872
6. Brennan, TerenceP	25	Fireman	Oct. 6, 1865	Assistant Foreman.	July 1, 1872
7. McNamee,Charles	28	Fireman	July 1, 1869	Assistant Foreman.	Mar. 1, 1873
8. Jones, Walter H.	25	Fireman	Oct. 21, 1870	Assistant Foreman.	Mar. 1, 1873
9. Conaghan, Patrick	23	Fireman	Oct. 20, 1865	Assistant Foreman.	Apr. 21, 1873
10. Braisted, WilliamC	25	Fireman	July 3, 1872	Assistant Foreman.	June 16, 1873
11. Campbell, James A	27	Fireman	Sept. 29, 1865	Assistant Foreman.	Aug.15, 1873
12. Moore, Edward S.	31	Fireman	Oct. 16, 1865	{ r Assistant Foreman { Assistant Foreman.	
13. Louis, Albert F	24	Fireman	Sept. 14, 1865	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman.	Apr. 1, 1871 Sept. 11, 1872
14. Burnett, Henry	33	Fireman	Sept. 22, 1865	Assistant Foreman.	Jan. 15, 1874
15. Cartright, Stephen	27	Fireman	Aug. 1, 1871	Assistant Foreman.	May 15, 1874
16. Flock, Will am F.	27	Ass't Foreman	Sept. 8, 1865	s Foreman	Oct. 15, 1870
17. Carey, Francis	25	Fireman	June 2, 1868	Assistant Foreman.	Dec. 21, 187
18. Wright, Aug. H	29	Fireman	May 4, 1875	Assistant Foreman.	May 1, 1876
19. Kruger, Charles	23	Ass't Engineer	July 3, 1872	Assistant Foreman.	Sept.27, 1877
W., Jr S 20. Kenehan, Rich. F.	30	Fireman	July 1, 1875	Assistant Foreman.	Apr. 3, 1878
21. Finn, John	29	Fireman		Assistant Foreman.	Aug. 21, 187
22. McCarthy, Patrick	1	Fireman	June 15, 1872	Assistant Foreman.	Apr. 27, 1879
23. O'Rourke, Owen	25	t Firemar	Sept. 22, 1865 Feb. 12, 1875	Assistant Foreman	July 10, 187

r Reduced to ranks, May 9, 1866. s Reduced to Assistant Foreman, June 24, 1374. t Discharged while detailed as Carpenter, January 1, 1875.

		ORIGINAL APPOIN	NTMENT.	Ркомотю	N.
Name.	Age.	Grade.	Date.	Grades.	Dates.
24. Browning, William	21	Fireman  Ass't Engineer of Steamer	Apr. 23, 1869 May 9, 1873	\{u\) Assistant Engineer \(\) of Steamer \(\). \(\) Engineer of Steamer \(\) Assistant Foreman.	June 1, 1871 Aug. 1, 1872 Feb. 1, 1886
25. O'Reilly, Pat'k H.	23	Fireman	Aug. 21, 1875	Assistant Foreman.	July 20, 1880
26. Kerrigan, Francis.	29	Fireman	May 1, 1875	Assistant Foreman.	Sept. 16, 1886
27. Case, Wright, Jr	25	Fireman	May 1, 1875	Assistant Foreman.	Nov. 12, 188
28. McCarthy, John	29	Fireman	Sept. 15, 1871	Assistant Foreman.	June 9, 188
29. Moss, Joseph	28	Fireman	Dec. 1, 1871	Assistant Foreman.	Nov. 1, 188
30. Gerity, James J	24	Fireman	Feb. 1, 1874	Assistant Foreman.	Nov. 1, 188
31. Kelly, Thomas	28	v Fireman	Sept. 18, 1865 June 15, 1867	Assistant Foreman.	Nov. 25, 188
32. Hyde, David	27	Fireman	July 17, 1873	Assistant Foreman.	Mar. 22, 188
33. Farley, Thomas	25	w Fireman	May 13, 1868 Sept. 1, 1869	Assistant Foreman.	Apr. 10, 188
34. Murphy, John	24	Fireman	Oct. 17, 1870	Assistant Foreman.	Aug. 7, 188
35. Aiken, Alex. D	24	Fireman	July 19, 1871	Assistant Foreman.	Dec. 1, 188
36. Barber, John	26	Fireman	Nov. 3, 1870	Assistant Foreman.	Feb. 1, 188
37. Daniels, Clement L.	25	Fireman	Oct. 11, 1873	Assistant Foreman.	Mar. 4, 188
38. Ryan, Ed. F	22	Fireman	July 3, 1872	Assistant Foreman.	Mar. 6, 188
39. Murphy, Lawrence	24	Fireman	June 12, 1871	Assistant Foreman.	May 17, 188
40. Kennedy, Math. T	28	Private	Dec. 21, 1877	Assistant Engineer of Steamer Assistant Foreman.	Nov. 21, 187 May 23, 188
41. Margison, Charles	27	Private	Jan. 22, 1877	Assistant Engineer of Steamer Assistant Foreman.	May 1, 187 May 23, 188
42. Jones, William H.	29	Ladderman	Sept. 25, 1875	Private	Apr. 1, 187 May 23, 188
43. Needham, John T.	27	Private	Jan. 1, 1881	Assistant Foreman.	May 23, 189
44. Murphy, John McI	23	Private	Nov. 21, 1881	Assistant Foreman.	May 23, 188
45. Hopper, Charles	23	x Fireman		Assistant Foreman.	Aug. 1, 188
46. Meehan, Edward	. 24	Fireman	July 23, 1870	Assistant Foreman.	Aug. 13, 188
47. Beekler, Jacob	2 ‡	Fireman	Mar. 15, 1871	Assistant Foreman.	Nov. 1, 188
48. Autenreith, Chas.J	. 25	Private	Feb. 12, 1881	Assistant Engineer of Steamer	Dec. 17, 18
49. Hearn, John	. 24	Fileman	Sept. 11, 1855	Assistant Foreman	n

u Resigned, September 16, 1872. v Resigned, September 29, 1865.

w Dismissed August 10, 1869. x Resigned, August 1, 1871.

27		ORIGINAL APPOIN	NTMENT.	Ркомотю	N
Name.	Age.	Grade.	Date.	Grades.	Dates.
50. Head, Thomas	26	Fireman	Feb. 15, 1869	Assistant Foreman.	May 20, 1884
51. Touhey, Martin J.	23	Fireman	Mar. 15, 1872	Assistant Foreman.	May 20, 1884
52. Donohue, Malachi	24	Fireman	June 10, 1870 Dec. 1, 1873	y Assistant Foreman Assistant Foreman.	Oct. 17, 1872 May 20, 1884
53. Gaffney, Andrew.	27	Fireman	Dec. 1, 1873	Assistant Foreman.	May 20, 1884
54. Reed, Samuel	25	Fireman	Sept. 1, 1875	Arsistant Foreman.	May 20, 1884
55. Hennessey, Wm	30	z Fireman Private	Dec. 21, 1874 Jan. 18, 1882	Assistant Foreman.	May 20, 1884
56. Leonard, John H.	32	Private	Feb. 1, 1877	Fireman	Apr. 13, 1877 Apr. 20, 1877 Oct. 4, 1878 Aug. 16, 1884
57. O'Grady, Joseph.	27	Private	Nov. 24, 1877	Assistant Engineer of Steamer Assistant Foreman.	Oct. 20, 1880 Aug. 16, 1884
58. Reilly, Bernard J.	27	Fireman	May 1, 1875	Assistant Foreman.	Aug. 21, 1884
59. Reilly, Michael A.	22	Private	Apr. 4, 1881	Assistant Foreman.	Aug. 21, 1884
60. Kinsella, Henry	27	Private	Feb. 3, 1883	Assistant Foreman.	Aug. 27, 1884
61. McNamara, John J.	26	Fireman	Dec. 7, 1877	Assistant Engineer  of Steamer Assistant Foreman.	Apr. 11, 1880 July 1, 1885
62. Petersen, Adolph J.	25	Fireman	Oct. 25, 1873	Assistant Foreman.	July 1, 1885
63. Tobin, Edward H.	22	Fireman	May 4, 1875	Assistant Foreman.	July 1, 1885
64. Beshinger, Joseph.	23	Private	May 10, 1880	Assistant Foremon.	July 1, 1885
65. Banta, Samuel	28	Private	Jan. 22, 1883	Assistant Foreman.	July 1, 1885
66. Gormley, Patrick.	28	Private	May 15, 1884	Assistant Foreman.	July 1, 1885
67. Ryan Patrick F	28	aa Engineer of Steamer Ass't Engineer of Steamer	Nov. 1, 1871 Sept. 6, 1874	Engineer of Steamer Assistant Foreman.	
68. Delaney, James	23	Fireman	Aug. 1, 1869	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman.	
69. Honan, John S	25	Private	May 8, 1883	Assistant Foreman.	Nov. 15, 1885
70. McAlister, Bernard	31	Private	Dec. 3, 1877	Assistant Engineer of Steamer Steamer Assistant Foreman.	June 1, 1880 Jan. 1, 1886
71. Shute, James H	23	Fireman	Oct. 17, 1873	Assistant Foreman.	Feb. 1, 1886
72. Burns, John J	21	Private	Aug. 17, 1883	Assistant Foreman.	Feb. 1, 1836
73. Martin, Michael	26	Fireman	July 1, 1873	Assistant Foreman.	Dec. 1, 1886

y Dismissed, November 23, 1873. z Dismissed, October 19, 1876. aa Resigned, November 3, 1873.

		ORIGINAL APPOI	NTMEŅT.	Ркомотю	on.		
Name.	Age.	Grade.	Date.	Grades.	Dates.		
74. Miller, William	28	Private	Apr. 2, 1881	Assista t Foreman.	Dcc. 1, 1886		
75. Flaherty, James	29	Private	Feb. 15, 1882	Assistant Foreman.	Dec. 1, 1886		
76. Whelan, John T	29	Fireman	May 20, 1884	Assistant Foreman.	Dec. 1, 1886		
77. Taylor, Joseph W	25	Fireman	Jan. 1, 1873	Assistant Foreman.	Mar. 1, 1887		
78. Nash, William H.	21	Fireman	Sept. 9, 1876	Assistant Engineer. Engineer Assistant Foreman.	Jan. 1, 1886		
79. Burke, Coleman J.	22	Private	Jan. 1, 1878	Assistant Engineer, Engineer Assistant Foreman.	Jan. 1, 1886		
80. Norris, Ric' ard J.	25	Private	July 15, 1879	Assistant Foreman.	Feb. 1, 188		
81. Reilly, Michael F.	29	Private	Jan. 13, 1880.	Assistant Foreman.	Feb. 1, 188		
82. Farrell, George F.	25	Private	Nov. 1, 1880	Assistant Foreman.	Feb. 1, 188		
83. Reilly, Henry P	21	Private	Oct. 21, 1881	Assistant Foreman.	Dec. 27, 188		
84. McCartney, Jas. J	28	Fireman	Aug. 1, 1884	Assistant Foreman.	Dec. 27, 188		
85. Naughton, John J.	23	Private	Dec. 1, 1881	Assistant Engineer. Engineer. Assistant Foreman.	Feb. 1, 188		

Year of Entry into the Uniformed Force of Officers and Members in Active Service on December 31.

Appointed in-	Officers.	Engineers.	FIREMEN.	TOTAL.
1865	51	9	35	95
1866	12	5	16	33
1867	I	2	τ	4
1868	7	6	7	20
1869	9	6	18	33
1870	6	2	14	22
1871	14	2	8	24
1872	5	4	22	31
1873	15	7	43	65
1874	6	8	35	49
1875	13	7	21	41
1876	2		8	10
1877	7	10	3	20
1878	2	I	2	5
1879	3	7	6	16
1880	4	II	26	41
1881	9	4	32	45
1882	4	3	49	56
1883	4	9	70	83
1884	6	11	73	90
1885		5	32	37
1886		7	48	55
1887		3	41	44
1888			106	106
	180	129	716	1,025

Number and Character of Alarms, Manner of Receipt and Cause.

	Total.	94	III	3,217	3,422
	Fire.	:	:	:	:
	Smoke, etc., issuing from Premises.	:	COI	:	100
	Reflection of Distant Fire.	ı		:	-
	Reflection from Stoves, etc.	:	11	:	II
	Not ascertained.	12	<i>/</i> :	:	12
	Malicious Mischief.	H H	:	:	14
CAUSE.	Ignorance.	7	:	:	7
	Heat and Disarrangement of Aut. Telegraph.	#	:	:	4+
	Fire outside of City.	:	:	:	:
	Explosions.	3	:	:	60
	Exhibition of Depart-	:	:	:	:
	Erron	н	:	:	н
	Cry of " Fire."	4	:	:	4
	Accidents.	. 00	:	:	∞
	Total.	94	111	3.217	3,422
CEIPT	Automatic Telegraph	46	1	3	50
MANNER OF RECEIPT.	Verbally.	00	37	1,437	1,482
MANNE	Special Department Tele-graph S gnals.	١٧٦	N	33	39
	From Department Street Alarm-boxes.	35	71	1,745	1,851
	ALARMS,	Unnecessary	Indication of fire	Fires	Total

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1 307	1,172	551	195	166	3,217
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73					
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e communicated by attacl	3	Dist	Citi	allo "	all t
were communicated by attacl	3	" Dist	" Citi	" allo	all t
arms were communicated by attacl	"	" Dist	Citi	allo "	all t
309 alarms were communicated by attachés of this Department, of which 307 proved to be for fires.	" " 86	598 " Dist	207 " Citi	*	3,422 " all t

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## Statistics of Fires.

	Statistics of Tites.													
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.	
In buildings -														
Confined to point of starting	346	259	254	247	200	252	294	204	178	168	206	280	2,888	
Confined to building	24	22	17	25	15	9	16	14	10	12	16	19	200	
Extended to other (buildings)	4	5	7	2	6	7	6	1	I	4	3	3	49	
Number in buildings.	374	286	278	275	221	268	316	219	189	184	225	302	3,137	
In vessels	4	2	I	2			2	2	2	3	4	4	26	
In other places (woods, etc.)	1	2	6	6	6	4	7	11		3	5	3	54	
Total	379	290	285	283	227	272	325	232	191	190	234	309	3,217	
D				=		-		=		==	==			
Extinguished—														
With one engine)	227	171	180	179	146	202	225	162	122	125	147	191	2,078	
stream	89	72	59	60	43	44	65	44	45	39	46	80	686	
With two or three	49	33	35	33	28	16	28	22	21	18	32	32	347	
With more than three engine streams	14	14	11	11	10	10	6	4	3	8	9	6	105	
Total	379	290	285	283	227	272	325	232	191	190	234	309	3,217	
Extent of damage to build- ings and vessels—	==		=			==		===		==				
Built mainly of brick, stone or iron:														
Slight	III	88	95	85	62	64	71	43	52	54	58	79	862	
Considerable	8	8	10	9	5	5	7	7	2	I	8	2	72	
Destroyed	3		3	•••	1	2							9	
Total	122	96	108	94	68	71	78	50	54	55	66	81	943	
Extent of damage to buildings and vessels—				==								_		
Built mainly of wood:														
Slight	20	20	17	15	9	10	12	9	8	5	8	9	142	
Considerable	4	2	3	4	ı	3	4	3	2	3	4	1	34	
Destroyed		2	ı	1			4				1		9	
Total	24	24	21	20	10	13	20	12	10	8	13	10	185	

													_
	January.	February.	March.	April.	May.	June.	July.	August.	September.	Octob.r.	November.	December.	Year.
Total buildings and ves- sels damaged	146	120	129	114	78	84	98	62	64	63	79	91	1,128
To which the damage was—													
Slight	131	108	112	100	71	74	83	52	60	59	66	88	1,004
Considerable	12	10	13	13	6	8	11	10	4	4	12	3	106
Destroyed	3	2	4	I	ı	2	4				1		18
	=	=	=		=	=	=	=	=	=	==	=	==
Number of fires resulting in damage to contents only; tuildings or vessels not damaged	44	34	38	35	39	53	75	48	32	33	32	57	520
in nominal damages (less than \$10) to either structures or contents	124	87	106	95	85	105	117	96	62	<b>6</b> τ	77	101	1,116

# Number of Fires Occurring each Day of the Week, and during the Different Hours and Periods of the Day, by Months.

				_								
January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	<b>December</b> .	Year.
74	40	36	41	39	40	60	25	27	31	27	60	501
56	50	31	48	4 I	47	5 t	35	20	27	37	41	484
47	53	_2	40	41	46	60	30	27	28	40	37	481
44	41	42	42	36	33	25	43	27	33	4 4	32	443
56	38	49	39	26	29	33	32	37	25	31	43	438
49	28	59	29	19	44	25	37	21	28	29	45	413
53	40	36	44	25	33	70	29	32	18	20	51	457
	=				==	-	=				-	-
9	10	10	11	7	7	19	7	6	8	9	10	113
7	9	8	II	11	9	8	7	6	8	7	2	93
6	7	9	6	7	7	11	ıτ	3	2	5	8	82
4	5	5	5	4	9	10	6	4	4	3	7	66
7	10	2	8	1	3	13	8	5	4	1	5	€7
11	5	8	8	4	5	5	2	5	2	7	5	67
	74 56 47 44 56 49 53 9 7 6 4 7	74 40 56 50 47 53 44 41 56 38 49 28 53 40 9 10 7 9 6 7 4 5 7 10	74 40 36 36 50 31 47 53 .2 44 41 42 56 38 49 49 28 59 53 40 36  9 10 10 7 9 8 6 7 9 4 5 5 7 10 2	74 40 36 41 56 50 31 48 47 53 .2 40 44 41 42 42 56 38 49 39 49 28 59 29 53 40 36 44 9 10 10 11 7 9 8 11 6 7 9 6 4 5 5 5 7 10 2 8	74 40 36 41 39 56 50 31 48 41 47 53 .2 40 41 44 41 42 42 56 56 38 49 39 26 49 28 59 29 19 53 40 36 44 25  9 10 10 11 7 7 9 8 11 11 6 7 9 6 7 4 5 5 5 4 7 10 2 8 1	74 40 36 41 39 40 56 50 31 48 41 47 47 53 .2 40 41 46 44 41 42 42 26 33 356 38 49 39 26 29 49 28 59 29 19 44 53 40 36 44 25 33 3	74 40 36 41 39 40 60 56 50 31 48 41 47 51 47 53 .2 40 41 46 60 44 41 42 42 36 33 26 56 38 49 39 26 29 33 49 28 59 29 19 44 25 53 40 36 44 25 33 70 9 10 10 11 7 7 19 7 9 8 11 11 9 8 6 7 9 6 7 7 11 4 5 5 5 4 9 10 7 10 2 8 1 3 13	74 40 36 41 39 40 60 25 56 50 31 48 41 47 51 35 47 53 .2 40 41 46 60 30 44 41 42 42 26 33 26 43 56 38 49 39 26 29 33 32 49 28 59 29 19 44 25 37 53 40 36 44 25 33 70 29  9 10 10 11 7 7 19 7 7 9 8 11 11 9 8 7 6 7 9 6 7 7 11 11 4 5 5 5 5 4 9 10 6 7 10 2 8 1 3 13 8	74	74	74	74 40 36 41 39 40 60 25 27 31 27 60 56 50 31 48 41 47 51 35 20 27 37 41 47 53 .2 40 41 46 60 30 27 28 40 37 44 41 42 42 36 33 26 43 27 33 44 22 56 38 49 39 26 29 33 32 37 25 31 43 49 28 59 29 19 44 25 37 21 28 29 45 53 40 36 44 25 33 70 29 32 18 26 51  9 10 10 11 7 7 19 7 6 8 9 10 7 9 8 11 11 9 8 7 6 8 7 2 6 7 9 6 7 7 11 11 3 2 5 8 4 5 5 5 4 9 10 6 4 4 3 7 7 10 2 8 1 3 13 8 5 4 1 5

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Between the hours of—													
6 a. m. and 7 a. m	11	5	,5	9	5	3	7	1	3	3	5	5	€2
7 a. m. and 8 a. m	12	8	4	3	8	8	9	8	3	3	6	8	80
8 a. m. and 9 a. m	20	4	10	10	4	9	7	11	3	2	3	7	90
9 a.m. and 10 a.m	19	15	18	11	8	11	7	4	9	4	7	9	122
10 a.m. and 11 a.m	10	11	11	15	6	11	19	9	11	8	8	12	135
11 a.m. and 12 m	9	7	13	10	14	12	19	11	9	6	6	13	129
12 m. and 1 p. m	13	9	13	7	8	14	8	9	3	8	10	10	112
1 p, m, and 2 p. m	17	13	7	13	8	10	14	5	12	7	13	20	139
2 p. m. and 3 p. m	16	12	12	12	12	19	23	. 9	8	8	10	14	155
3 p. m. and 4 p. m	13	10	13	12	13	10	22	11	12	5	4	9	139
4 p. m. and 5 p. m	24	14	14	16	11	11	7	7	6	12	21	15	163
5 p.m. and 6 p.m	32	15	12	20	18	8	14	11	6	21	17	39	213
6 p. m. and 7 p. m	31	17	29	16	13	14	15	14	14	18	23	29	233
7 p. m. and 8 p. m	19	28	24	19	11	18	16	17	18	14	17	15	216
8 p. m. and 9 p. m	25	22	20	21	20	18	21	21	11	11	15	29	234
9 p. m. and 10 p. m	26	23	15	19	13	22	17	16	13	12	20	12	208
10 p. m. and 11 p. m	16	16	15	7	7	16	22	17	12	12	7	9	156
11 p.m. and 12 midnight	17	11	8	14	9	18	12	10	9	8	10	17	τ43
Between 6 a.m. and 6 p. m	201	123	132	138	120	126	156	95	85	87	110	161	1,539
" 6 p. m. and 6 a. m	178	167	153	145	107	146	169	136	106	103	124	148	1,678
Total each month.	379	290	285	283	227	272	325	232	191	190	231	309	3,217

## Notable Fires and Extraordinary Services.

January 2.—No. 81 White street, a five-story brick building, 25 by 100 feet, occupied by dealers in cloth. The fire originated in the cellar, and extended through the recesses in the walls, to all the floors and to the roof, considerably damaging the building; it also extended to No. 79 White street, a five-story brick, marble front building, 25 by 80 feet, occupied by cloak manufacturers, slightly damaging it; also to Nos. 83 and

85 White street, a five-story brick, free-stone front building, 50 by 80 feet, occupied as a suspender manufactory, slightly damaging it; also to Nos. 84 and 86 White street, a six-story brick, iron front building, 50 by 100 feet, occupied as a carpet storage warehouse, slightly damaging it. The first alarm was received at 7.46 P. M., and at 8.05 and 8.23 P. M. respectively second and third alarms were sent out, followed by special calls for four companies. Thirteen engine and five hook and ladder companies and a water tower were required to extinguish the fire, which was under control in one hour and ten minutes. The cause was not ascertained, and the loss was \$72,200.

January 15.—Nos. 54, 56 and 58 Warren street, a five-story brick building, 75 by 80 feet, occupied as a patent medicine manufactory, etc. The fire originated on the second floor and extended to the third, fourth and fifth floors and to the roof by stairway and elevator shaft, and considerably damaged the building. The first alarm was received at 4.36 A. M., and on the arrival of the Department, fire was found throughout the building from the second to the fifth floors, and at 4.41 A. M. a third alarm was sent out, followed by special calls for three companies. The services of fourteen engine and four hook and ladder companies and a water tower, were required to extinguish the fire, which was under control in one hour. The cause of the fire was spontaneous combustion of canvas covers, and the estimated loss was \$81,725.

I January 25.—Nos. 93 and 95 William street, a five-story brick building, 50 by 60 feet, occupied as fire-proof paint manufactory. The fire originated on the third floor, and extended by stairway and hatchway to the first, second, fourth and fifth floors and to the roof, considerably damaging the building. The first alarm was received verbally at the quarters of Engine Co. No. 4 from a police officer, and on the arrival of that company the fire had such headway that the commanding officer

immediately sent out a second alarm at 11.15 P.M., which was followed at 11.23 P.M. by a third alarm. The fire required the services of eleven engine and four hook and ladder companies and a water tower, and was under control in forty minutes. The cause was not ascertained, and the loss is estimated at \$57,875.

January 30.—Nos. 549 and 551 Broadway, a six-story brick building, 50 by 200 feet, occupied by importers of fancy goods, etc., from which the fire extended southward to Nos. 547 and 545 Broadway, five and six stories in height, 25 by 100 feet each, and occupied by dealers in artificial flowers and tailors' trimmings, respectively, and northward to No. 553 Broadway, a five-story brick building, 25 by 100 feet, occupied by dealers in artificial flowers, millinery, cloths, etc. All of these buildings extended through to Mercer street, and all were destroyed except No. 545, which was slightly damaged. Special report of this fire was made to the Mayor on February 6, as follows:

"The fire on the 30th ult., on Broadway, between Spring and Prince streets, was the most destructive since the Fourth Avenue Railroad Stable fire in 1881, which resulted in the loss of \$2,392,691.

"The preliminary estimate of the loss at the recent fire is \$1,500,000.

"The Chief of the Department has, as is customary in the case of extraordinary occurrences of this nature, made a special report on the operation of the Broadway fire to the following effect: The first alarm was sounded at 6.33 A. M. on the 30th ultimo, and the fire which is supposed to have originated in the cellar of the six-story building, Nos. 549 and 551 Broadway (extending through to Mercer street), was, on the arrival of the force, found to have already spread throughout the building; its very rapid progress being facilitated by an unusually large open light-shaft in the centre of the structure. The companies summoned by the first alarm arrived at the fire within two minutes after said alarm had been received. No time was lost

in sending for the needed re-enforcements, the record showing that the third alarm was sounded at 6.36 A. M., three minutes after the first. At 7.13 A.M. the upper portion of the bearing walls of Nos. 549 and 551 Broadway were forced outward and falling upon the adjoining buildings, which they overtopped on each side, carried the fire into them. At this juncture the Chief of Department sent out a simultaneous call for the companies due on third alarm at station 379 (Broadway, near Twenty-fifth street). These re-enforcements were needed to prevent the further extension of the fire which was then raging with great fury, and after a long and hard battle they successfully accomplished the result. During the progress of the fire one of the officers of the force, Assistant Foreman Michael F. Reilly, of Hook and Ladder Company No. 8, then commanding his company, while engaged in opening an iron shutter in the building, No. 547 Broadway, was struck by a portion of the falling iron, and, on being extricated from the ruins, was found to have sustained very severe injuries, viz.: a fracture of the left thigh and of a rib, a compound fracture of the left leg, and several contusions on the head and body. condition is now reported to be favorable to recovery. Several other members of the force received slight injuries, but were soon able to return to duty. The services of twenty-four engine and eight hook and ladder companies and one water tower were required to extinguish the fire."

The cause of the fire was not ascertained, and the loss is estimated at \$1,326,480.

February 20.—Nos. 548 and 550 West Twenty-third street, a six-story brick building, 50 by 100 feet, occupied as a spring mattress manufactory on the first floor, on which the fire originated and extended thence by stairway and elevator to all other parts of the building, which was occupied as a silk manufactory. The building was considerably damaged. It also extended to Nos. 540 to 546 West Twenty-third street, a four-story brick building, 100 by 100 feet, occupied as a silk manufactory,

slightly damaging it; also to the lumber-yard in the rear of these buildings. The first alarm was received at 8.3034 P. M., and at 8.47 P. M. a third alarm was sent out, followed by special calls for three companies. On the arrival of the Department, the entire building (Nos. 548 and 550) was found to be on fire throughout. It required the services of thirteen engine companies (including the floating Engine No. 51), and four hook and ladder companies to extinguish the fire, and it was under control in one hour and thirty minutes. The cause of the fire could not be ascertained, and the loss was estimated at \$147,000.

February 28.—Nos. 56 and 58 East Fourteenth street, a fivestory brick building, 50 by 160 feet, occupied by the Union Square Theatre and the Morton House. The fire originated in the theatre, on the stairway of the gallery, between the first and second floors, and extended throughout the auditorium and lobbies, but was prevented from penetrating behind the proscenium wall. It also extended to the hotel which was slightly damaged. The alarm was communicated to Hook and Ladder Company No. 3 (Thirteenth street, near Fourth avenue), by a citizen, upon which an alarm from box 342 (Fourth avenue and Thirteenth street) was immediately sent out by the Chief of the Sixth Battalion, at 1.08 P. M., followed at 1.09 P. M. by the third alarm from box 341 (Broadway and Fourteenth street). Special. calls for three engine and four hook and ladder companies were afterward sent out, and it required the services of fourteen engine and five hook and ladder companies to extinguish the fire, which was under control in one hour and forty minutes. While Engine Companies Nos. 13 and 14 were working with their lines on the stairway leading to the balcony of the theatre, the supports of the stairway and roof burned away and the debris fell upon the firemen, injuring four members of Engine Company No. 14, and two of Engine Company No. 13, one of whom had a leg broken, and all were severely burned and bruised. The cause of the fire was defective construction (ignition of floor-beams which had been built into a large flue),

and the loss was estimated at \$32,920. The water supply was inadequate.

February 28.—Nos. 54 and 56 Park street, a five-story brick building, 50 by 125 feet, occupied as a lithographic printing establishment. The fire originated on the fourth floor, and extended by stairway and hatchway to the roof, considerably damaging the building. The first alarm was received at 9.50½ P. M. from the automatic instrument on the premises, and first, second and third alarms were sent out at 9.54, 9.54½ and 10.03 P. M. respectively, followed by special calls for three engine companies. It required the services of thirteen engine and four hook and ladder companies to extinguish the fire, and it was under control in two hours. The cause was woodwork in drying-room igniting from steam pipes, and the loss was estimated at \$94,200.

February 29.—Nos. 16 and 18 Dutch (corner Fulton) street, a five-story brick building, 100 by 25 feet, occupied as a manufactory of printers' supplies. The fire originated on the first floor under the stairway and extended up the stairway to all the floors and the roof, considerably damaging the building. The first alarm was received at 12.20 A. M., from box 46 (Fulton and William streets), and the companies due at that station being still in service at the fire at Nos. 54 and 56 Park street. special calls for the companies in quarters nearest to the location were sent, and on their arrival, at 12.27 A. M., finding that re-enforcements were needed, a third alarm was sent, which was followed at 12.37 A. M. by the simultaneous call 6-6-6-10-341=46, because of the headway the fire had obtained, and of the combustible nature of the contents of the adjoining premises, a large building filled with paints, oils, varnishes, etc. The services of nine engine and five hook and ladder companies were required to extinguish the fire, and it was under control in one hour. The fire was caused by carelessness of occupant with a match or a cigar igniting waste paper, and the estimated loss amounted to \$26,650.

Within the thirty-three hours intervening between 1.50 A. M., on the 28th, and 9.49 A. M., on 29th of February, during which the three fires last described took place, nineteen other fires occurred in various sections of the city, fourteen of them south of Fourteenth street, and two of the fourteen were of such magnitude as to require the services of a greater number of companies than the first alarm contingent, and were in the immediate vicinity of the Park street and Dutch street fires.

March 1.—Nos. 375 to 393 Lexington avenue, a six-story brick building, 200 by 195 feet, occupied as a furniture manufactory, and for other manufacturing purposes, extending from Forty-first to Forty-second street. The fire originated on the first floor, and extended to all parts of the building. entirely destroying it; and also to the buildings Nos. 148, 150 and 152 East Forty-second street, each four-story brick, 25 by 50 feet, occupied as dwellings, which were all destroyed by falling walls. It also extended to the buildings Nos. 154, 156 and 158 East Forty-second street, each four-story brick, 25 by 50 feet, occupied as dwellings, slightly damaging them; also to Nos. 395 and 397 Lexington avenue (northeast corner of Fortysecond street), a five-story brick, brown-stone front building, 40 by 75 feet, occupied as a hotel, which was slightly damaged; also to the window-frames and cornices of Nos. 139, 141 and 143 East Forty-second street (north side), each five-story brick, brown-stone front buildings, 25 by 70 feet, occupied as dwellings, slightly damaging them; also to the window-frames and cornices of Nos. 128, 130 and 132 East Forty-first street (south side), each four-story brick buildings, 18 by 50 feet, occupied as dwellings, slightly damaging them. Large cinders from the fire fell on the roof of St. Agnes Roman Catholic Church, a twostory brick structure, 50 by 100 feet, situated on the north side of Forty-third street, near Lexington avenue, and were extinguished by a detail of firemen, with slight damage. The intense heat also set fire to the sleepers and ties of that portion of the structure of the Elevated Railroad, running on the south

side of Forty-second street, from Third avenue to the Grand Central Depot, and a section about 100 feet in length of the structure was destroyed by the falling walls. The first alarm was received at 12.26 1/4 P. M., from the special building signal box located in the building Nos. 375 to 393 Lexington avenue, and on the arrival of the first companies, the fire was burning so fiercely that at 12.30 P. M. a second alarm was sent out. On the arrival of the first chief officer, at 12.31 1/4 P. M., he immediately ordered a third alarm, and at 12.42 P. M. the simultaneous call 6-6-6-12-341=483, was sent, the exceedingly combustible nature of the contents of the building generating an intense heat and endangering the buildings opposite on both Forty-first and Forty-second streets. The services of twenty-three engine and seven hook and ladder companies were required to extinguish the fire, which was under control in two hours. The water supply was entirely inadequate. The fire was caused by sparks from a locomotive on the elevated railroad, and the estimated loss was \$361,000.

March 12.—Nos. 9 and 11 Laight street, a four-story brick building, 50 by 100 feet, occupied as a paper-box manufactory. The fire originated on the second floor and extended to all parts of the building, which was considerably damaged; it also extended to No. 7 Laight street, a four-story brick building, 25 by 90 feet, occupied as a bookbindery, slightly damaging the building. The first alarm was received at 6.45 P, M., and at 7.07 P. M. a second alarm was sent out, followed by a special call for an engine company. The services of three engines, with two lines from each, and three hook and ladder companies, were required to extinguish the fire, which was under control in three hours. The fire was caused by carelessness in putting hot ashes in a wooden receptacle, and the loss was estimated at \$29,600. The first chief officer reports that on his arrival the fire had obtained great headway because only one engine and one hook and ladder company of the five companies due on first alarm, found it possible to reach the fire in time to be of service, the others being delayed for at least an hour. None of the companies due on the second alarm were able to reach the fire with their apparatus. Their delays were caused by the condition of the streets, resulting from the great fall of snow during the preceding eighteen hours.

March 13.—No. 559 West Forty-second street, a five-story brick building, 25 by 60 feet, occupied by ten families as a dwelling. The fire originated in the cellar, and extended to all parts of the building, destroying it; it also extended to No. 550 West Forty-second street, a five-story brick building, 25 by 60 feet, also occupied by ten families as a dwelling, slightly damaging it. The first alarm was received from a police officer at 2.30 A. M., in the quarters of Engine Company No. 2 (located at No. 530 West Forty-third street), and on the arrival of that company the building was on fire from cellar to roof, and a third alarm was immediately sent out. This was at 2.47 A. M., the depth of the snow and the fierceness of the storm having made it so difficult to travel that the company required seventeen minutes to go a distance of less than one-fifth of a mile, and it was impossible for any other apparatus, except the tender of Engine Company No. 26, to reach the fire. The stream from Engine Company No. 2 and a stream stretched from hydrant by the tender of Engine Company No. 26, with the assistance . of members of Hook and Ladder Companies Nos. 2 and 4 (who arrived with tools but without apparatus), was all that could be obtained to extinguish the fire, which, notwithstanding the serious impediments, was under control in about two hours. The fire is supposed to have been of incendiary origin, and the amount of loss is estimated at \$24,250.

During the five days, March 12, 13, 14, 15 and 16, while the streets were in an almost impassable condition in consequence of the great storm of March 12 and 13, there were, including the two fires last described, forty-five fires, being an average of nine per day, one more than the daily average for the year 1887.

The situation during this period was such as to call for extraordinary efforts on the part of the uniformed force. Not only were the streets well nigh impassable for the apparatus, but the storm had also crippled the fire-alarm system and rendered a large number of the alarm-box and other telegraph circuits useless. All possible precautions against the threatening dangers were promptly taken. Leaves of absence were suspended, a large number of extra horses and sleighs of all kinds were obtained, and a special corps of telegraph linemen was put at work restoring the lines.

In recognition of the faithful and valuable services of their subordinates, so willingly rendered during this trying emergency, and the skill and good judgment displayed by the prominent officers, the Commissioners adopted the following resolution at a meeting held on the 19th day of March:

Resolved, That the Fire Commissioners desire to place upon record their admiration of the excellent conduct of their subordinates in all branches of the Department during the past trying winter months, and to commend particularly the fidelity, courage and resolute devotion to duty of the Chief of Department and all his subordinates in the uniformed force, as well as the skill and coolness displayed by the officers and employees of the Fire Alarm Telegraph, and the excellent management of the Captain in charge of the Repair Shops and of the Captain in charge of the Hospital Stables, more especially during the crisis of last week. The Fire Commissioners are very proud of the fact that at the height of the late storm and for some time thereafter, when the streets of the city were choked up with snow, the firemen rose to the extraordinary demands of the occasion, as was shown by the fact that two dangerous thirdalarm fires were successfully checked. There is now to be added the record of a gallant effort to save human life at a fire occurring at No. 1141 Madison avenue, early this morning, resulting in serious injuries to a brave and meritorious officer, Lieutenant William Quirk, of Engine Company No. 22.

Fire Commissioners also desire to express their thanks to the many public-spirited citizens who rendered assistance in various ways during the late emergency.

The following testimonial was subsequently received from the New York Board of Fire Underwriters:

NEW YORK, April 2, 1888.

To the Board of Commissioners, Fire Department of New York City:

The dangerous situation of this city as regards fire during and immediately following the great storm of the 12th of March last, known as the "blizzard," was made the subject of comment at a meeting of the New York Board of Fire Underwriters on the 21st ultimo, and the undersigned were appointed to prepare and convey to the Board of Fire Commissioners and to the uniformed force of the Fire Department the appreciation of the underwriters of the heroic efforts of the firemen and the good results of their labors during the period of peril to the city. And also to gratefully acknowledge the energy displayed by the telegraph corps connected with the Department in so successfully coping with almost insurmountable difficulties and promptly restoring the service to its usual efficacy.

HENRY H. HALL, President,
G. T. PATTERSON, JR.,
JAMES A. SILVEY,
(Signed.)
A. M. KIRBY,
H. E. BOWERS,
SAMUEL TOWNSEND,

Committee.

The extra expenditure incurred during this period amounted in all to about \$6,217.16, and would have been much larger but for the generous public spirit of many citizens who gratuitously placed horses, sleighs, harness, etc., at the disposal of

the Department, accompanied in many cases by offers of additional assistance.

The Department has already acknowledged its indebtedness by letter to the following-named for assistance thus rendered:

The New York Board of Fire Underwriters.

The Broadway and other railways.

The Marvin Safe Company.

The Herring Safe Company.

Mr. Thomas E. Crimmins.

Mr. Richard Webber.

William H. Eckert, General Manager Metropolitan Telephone and Telegraph Company.

Bayley & Co.

J. W. Smith.

A. E. Merrill.

The Adams Express Company.

William A. Taylor & Co.

Michael Ginna.

Park & Tilford.

Shultz, Southwick & Co.

H. J. Allen & Co.

Phelps, Dodge & Co.

Metropolitan Van Co.

The Yuengling Brewing Co.

Third Avenue Railroad Co.

John F. Behliner.

Brother Leontine, Catholic Protectory.

C. & A. B. Krahmer.

Frank Bean.

John B. Hasslacher, Supt. George Ehret Brewing Co.

R. Hoe & Co.

Thomas Duel.

Benjamin Reynolds.

George V. Hecker & Co.

Dry Dock, East Broadway and Battery Railroad Company.

John Murphy.

John D. Perry.

John Rvan.

S. M. Sisson.

Tallen & Stadfeld.

The Harlem Railroad Company.

Charles A. Benedict.

G. D. Kuper & Bro.

J. K. Reid.

E. A. Harriott.

Edward Hous.

Spencer Wood.

Garner & Co.

Charles Israel.

Smith & Sills.

J. Mittnacht.

Acker, Merrall & Condit.

J. M. Geary.

Frederick J. Seelig.

Patrick Brady.

The Great Atlantic and Pacific Tea Co.

F. M. Schaeffer Brewing Co.

National Ice Co.

Henry Minching.

W. L. Chester.

Mr. Myer.

Charles Ryder.

March 19.—No. 38 East Eighty-fifth street (southeast corner of Madison avenue), a five-story brick building 25 by 75 feet, built for occupancy by four families, one on each of the stories above the first floor, the latter designed for use as a store, which, together with the fourth floor, was at the time vacant. The fire originated on the third story, and extended up into the fourth and fifth stories and through the roof, considerably

damaging the building. The alarm was communicated to Engine Company No. 22, verbally, at 6.53 A. M.; the first (telegraphic) alarm was received at 6.56 A. M., and a third alarm was sent at 6.59 A. M. At the time of the arrival of Engine Company No. 22, thick smoke was pouring in volumes from the third floor, and four of the occupants, Mrs. and Miss Westlake and her brothers, Frederick and Isaac C. Westlake, were hanging from the windows of that floor. Foreman Donohue (at the time commanding the battalion) immediately ordered the company to stretch a line of hose up the stairway, and the scaling ladders to be used.

For particulars of the rescue by Assistant Foreman Quirk at this fire, see "meritorious services" in a subsequent part of this report.

The fire required the services of ten engine and three hook and ladder companies to extinguish it, and was under control in fifty minutes. The cause could not be ascertained, and the amount of loss sustained was \$18,600. The water supply was found insufficient.

In addition to the notices of inadequacy of the water supply above noted, the same was also found deficient at the following fires:

January 30—1.07 P. M., No. 16 Pell street. February 16—1.08 P. M., Nos. 16–24 Nassau street. March 16—8.28 A. M., No. 125 Bowery.

April 25.—Nos. 524 to 532 West Thirteenth street, a five-story brick building, 125 by 50 feet, occupied by the Delamater Iron Works as a pattern shop. The fire originated on the third floor and extended to all floors, considerably damaging the building. The first alarm was received at 9.19 P. M., and at 9.26 and 9.37 P. M., respectively, second and third alarms were sent out. The fire obtained considerable headway, because the water was shut off at the time from the mains in the vicinity. The services of eleven engine, four hook and ladder companies and of both floating engines were required, and the fire

was under control in one hour and forty minutes. The fire was caused by friction of machinery, and the loss amounted, as estimated, to \$130,000.

April 26.—No. 47 Walker street, a five-story brick (iron front) building, 40 by 90 feet, occupied by manufacturers of cloak trimmings, etc. The fire originated on the third floor and extended by stairway and elevator shaft to the fourth and fifth floors, slightly damaging the building. The first alarm was received at 7.13 P.M., and at 7.18 and 7.23 P.M., respectively, second and third alarms were sent out. The fire required the services of ten engine and four hook and ladder companies, and was under control in one hour. The cause of the fire was not ascertained, and the loss was estimated at \$91,500.

June 6.—Nos. 139 to 147 East Fourteenth street, a threestory brick building, 116 by 122 feet, height 112 feet, occupied partly as a theatre and partly for meetings, balls, etc., known as Tammany Hall. The fire originated on the stage of the theatre, and burned away the truss and floor-beams supporting the third or main hall floor, causing the centre portion of it to fall, and thus allowing the fire to pass upward and into the third story. From the high roof the ceiling of the main hall on the third story was suspended, forming a space between the roof and ceiling about thirty feet high in the centre and extending over the entire building. This space was heavily charged with heat and smoke and proved a great hindrance to the work of extinguishing the fire until the force succeeded in opening the roof. The theatre part of the building was considerably damaged and the rest of the building slightly. The first alarm was received at 6.26 1/2 A. M., and at 6.29 1/2 A. M. a third alarm was sent out, and also special calls for five engine companies. fire required the services of fourteen engine and four hook and ladder companies, and was under control in one hour and fifteen minutes. The cause of the fire was not ascertained, and the estimated loss amounted to \$50,500.

June 25.—Nos. 671 to 675 First avenue (southwest corner of Thirty-ninth street), a six-story brick building, 100 by 75 feet, occupied as a cigar manufactory. The fire originated on the fifth floor, and extended throughout the building (through the elevator shaft), completely destroying it. It also extended to the building Nos. 663 to 669 First avenue, a six-story brick building, 100 by 75 feet, also occupied as a cigar manufactory, slighty damaging it. The following buildings were slightly damaged by radiation of heat from fire in the main building: No. 672 First avenue, a five-story brick building, 25 by 65 feet, occupied as a tenement; No. 676 First avenue, a two-story frame building, 20 by 40 feet, occupied as an office; No. 678 First avenue, a two-story brick building, 25 by 50 feet, occupied as a packing-box manufactory, and to Nos. 344 and 346 East Thirty-ninth street, each five-story brick buildings, 25 by 70 feet, occupied as tenements. The first alarm was received at 9.24 A. M., and at 9.26 1/2 A. M. a third alarm was sent out The fire required the services of eleven engine and four hook and ladder companies, the floating engines, Nos. 43 and 51, and a water tower, and was under control in two hours. The fire is believed to have been caused by workmen smoking, and the loss is estimated at \$178,940.

July 7.—No. 33 to 37 East Seventeenth street, a seven-story brick building, 75 by 200 feet, extending through to Eighteenth street, upon which it has a front of 125 feet. The building is used for various mercantile purposes on the lower floors and for a bookbindery on the upper floors. The fire originated on the sixth floor, in the bookbindery, and burned downward to the fifth floor, slightly damaging the building. The first alarm was received from the automatic instrument in the building at 12.26 A.M., bringing a Chief of Battalion and two companies. At 12.31 A.M. and 12.38 A.M., respectively, the nearest street alarm signal and a third alarm was sent out, followed by special calls for three engine and two hook and ladder companies. The fire required the services of thirteen engine

and six hook and ladder companies and one water-tower, and was under control in one hour and fifteen minutes. The cause of the fire could not be ascertained, and the loss amounted to \$114,000.

July 20.—No. 156 West Twenty-seventh street, a six-story brick building, 25 by 100 feet, occupied as a furniture manufactury. The fire originated on the first floor and extended (by elevator and stairways) to all the floors and the roof, considerably damaging the building. The first alarm was received at 12.32 A.M., and at 12.43 and 12.52 A.M., respectively, second and third alarms were sent out. The fire required the services of eleven engine and four hook and ladder companies, and was under control in one hour and twenty minutes. It was caused by the ignition of rubbish with a lighted cigar, through carelessness, and the loss was estimated at \$15,225.

August 3.—No. 197 Bowery (rear), a six-story brick building, 25 by 40 feet, occupied by various firms for the manufacture of clothing, etc. The fire originated on the first floor and extended with great rapidity up the stairway and hatchway. The first alarm was sent out from the special building signal box, located in the theatre adjoining, at 4.22 P. M. The firemen responded promptly, but upon their arrival the entire building was on fire, the flames pouring out of every window in the front of the structure. At 4.27 P. M. a third alarm was sent out. The fire extended throughout the entire building, which was considerably damaged. About one hundred persons (male and female) were employed in the building, of which number nineteen are known to have perished in the flames or in their efforts to escape before the arrival of the Department. The building was provided with a good fire-escape, connecting two windows on each floor of the front, and with an iron stairway from the third floor in rear. Eleven engine and four hook and ladder companies were at work during the fire, the duration of which was four hours and forty minutes. The cause of the fire was

the explosion of a kerosene oil stove, and the loss amounted to \$29,160.

August 13.—Convent of the Sacred Heart (between Tenth and St. Nicholas avenues, on the line of One Hundred and Thirty-second street). The main building was 200 by 300 feet and 50 by 175 feet, five stories high, with various wings, all built of brick and brown stone. The fire originated in the cupola of the main building, and at 8.04 P. M. the special building signal, which connects the institution with the Department telegraph, was received and responded to by the three nearest engine companies. At 8.16½ P. M. an alarm was received from a street box, and at 8.18 and 8.39 P. M., respectively, second and third alarms were sent. Subsequently special calls were sent for six engine and three hook and ladder companies, making the aggregate number twenty-one, of which sixteen were engine and five hook and ladder companies. The last six engine companies were called because additional hose was needed, only one of the engines being used. The Convent is located on very high ground, about 125 feet above the level of St. Nicholas avenue, and the approach therefrom for vehicles is by a very steep roadway. The building was without interior dividing walls, and the only water supply within the grounds was a small reservoir containing about 95,000 gallons of water. These circumstances, as a matter of course, tended very materially to make the work of the force very arduous. Fourteen thousand and six hundred feet of hose were used, and eleven engine and five hook and ladder companies were in service during the fire, which was under control in about eight hours. The fire was caused by hot coals falling from roofers' furnace and igniting woodwork, and the estimated loss is \$275,000.

September 22.—Nos. 403 to 407 East Fifty-fourth street, a five-story brick building, occupied as a brewery, ice-house, cooper shop, etc. The fire originated on the fourth floor, near the cooper shop and malt-room, and extended (by stairway and elevator) to the fifth floor and roof, considerably damaging the

building. The first alarm was received at 6.35 P. M., and on the arrival of the first officer the fire had extended over the entire fourth and fifth floors, going through the roof and also dropping down the elevator shaft to the cellar. At this time the employees were attempting to extinguish the fire with a line of small hose, and although a fire-alarm box key was located in the building, no attempt had been made to use it, a citizen kevholder, who discovered the fire from the outside, having sent out the alarm. The officer, immediately upon his arrival (at 6.39 P. M.), sent out a third alarm, which was followed shortly after by special calls for two engines, a fire boat and a water tower. The fire required the services of thirteen engines and four hook and ladder companies and one water tower, and was under control in one hour and fifty minutes. The cause of the fire could not be ascertained, and the loss was estimated at \$45,000.

November 10.—Nos. 1 to 6 Mission place, a five-story brick building, 40 by 100 feet, occupied as a manufactory of paper bags and also as a printing establishment. The fire originated in the cellar, and extended by stairs and hatchway to all the floors, considerably damaging the building. It also extended to Nos. 146 and 148 Worth street, a five-story brick, iron-front building, 50 by S5 feet, occupied as a printing establishment. slightly damaging it. The first alarm was received at 7.18 A. M., and at 7.21 A. M. a third alarm was sent out. The services of eleven engine and four hook and ladder companies were required, and the fire was under control in two hours and thirty minutes. The fire extended so rapidly at the start that six employees on the second floor were cut off from escape, and were slightly injured by being compelled to jump from windows to the street before the arrival of the Department. The cause of the fire was a lighted cigar falling through hole in vault lights and igniting paper stock in the basement, and the loss amounted to \$83,850.

November 17.—No. 512 Broadway, extending through to Crosby street, a six-story brick building, 30 by 200, and 50 feet front on Crosby street, occupied as a clothing manufactory. The fire originated on the fifth floor, and extended to the fourth and sixth floors by stairway, slightly damaging the building. The first alarm was received at 8.14 P. M., and at 8.21 and 8.52 P. M., respectively, second and third alarms were sent out. The services of five engine and four hook and ladder companies were required, and the fire was under control in forty-five minutes. The cause of the fire was escaped gas igniting, and the loss is estimated at \$108,150.

December 7.—Harlem river, at dock located between Willis and Brook avenues, the steamboat "Maryland," 300 feet long and 60 feet in width, used by the New Haven Railroad Company for the transportation of cars, with two sleeping and two ordinary passenger cars on board at the time the fire occurred, which were filled with passengers, who saved their lives with considerable difficulty. The fire is supposed to have originated in the galley, spreading thence rapidly to all parts of the boat, and considerably damaging it and the cars upon it. It also extended to the dock and to a tug-boat belonging to the railroad company, slightly damaging both.

The first alarm was received at II.19 P. M., and at II.35 P. M. a second alarm was sent out. Special calls were also sent out for four engine companies and also for the boat "John Fuller," performing service as Engine No. 43 while the "Havemeyer" was undergoing repairs. Special calls were also sent out for the Police boat "Patrol" and the Charities and Correction steamboat "Thomas Brennan," both of which boats are provided with fire pumps and designated by special call signals, but neither responded. The Department worked at a great disadvantage because the surroundings of the fire were such as to make it nearly impossible for the land companies to reach it. The nearest hydrant that could be used by a land engine was about seven hundred and fifty feet distant and the

way to it was obstructed by railroad cars, under which the lines of hose were stretched, there being no passage way between them. Some of the companies were compelled to stretch as much as fifteen hundred feet of hose to reach the fire.

The pressing need of another and more powerful fire-boat was again demonstrated at this fire, and it is a matter for congratulation that the oft-repeated demands of the Department for the necessary appropriation to enable the building of an improved boat have at last resulted in success, though the amount allowed is considerably less than was considered necessary upon a close estimate.

The services of five engines, three hook and ladder companies and one floating engine were required, and the fire was under control in one hour and twenty minutes. The cause of the fire was live coals falling from range and igniting woodwork of the boat, and the loss is estimated at \$113,100.

## Water Consumption.

As nearly as can be estimated 35,466,500 gallons of water were used by the land engines of the Department in extinguishing fires, including the quantity taken from the rivers; and in addition thereto an estimated quantity of 1,722,750 gallons of river water was used by the two floating engines, making an aggregate of 37,199,250 gallons.

## Meritorious Services.

The following rescues at fires and elsewhere, involving personal risk, were reported and recorded on the Roll of Merit for the year:

Foreman Peter H. Short, commanding Hook and Ladder Co. No. 1, and Firemen 1st grade Godfrey King, and Joseph P. Johnson, both of the same company, on January 23, at 9.44 P. M., at the fire which occurred in the four-story building, No. 305 Pearl street, rescued Foreman John H. White, commanding Engine Company No. 12, who, while working upon the

roof of the burning building with Foreman Short was, by the falling-in of the roof, precipitated to the fourth floor where the fire was then fiercely burning, being protected while in this perilous position by a part of the fallen roof under him and by streams of water from two of the engines at work at the fire. Foreman Short, having fortunately escaped the same fate by getting on top of the eight-inch wall of the building, at once directed a rope to be thrown to him from the roof of the building No. 303 Pearl street, adjoining the burning building, which was about ten feet below his position, and held this rope while Firemen King and Johnson climbed up it, hand over hand, to the top of the wall to his assistance. Foreman Short then leaned over the wall and directed the rope to Foreman White, who tied it around his body and was then raised by Foreman Short and Firemen King and Johnson to the top of the wall, and thence lowered to the roof of the adjoining building. rescue was timely, for Foreman White's scalp, face and hands were seriously burned, and he was, when rescued, for some time in a helpless condition. The heroic conduct of Foreman Short was especially commended by his immediate superior for again risking his life immediately upon his own escape from a dreadful death, by remaining upon a thin, crumbling wall above the fire, unsupported on either side, and by his prompt and decisive action, while in this dangerous position, inspiring others to assist him in the rescue of his brother officer. The President of the Department, upon reference of this report to him, returned it with the following indorsement: "Respectfully returned with the information that Foreman Short's name has appeared on the Roll of Merit three times heretofore, and with the recommendation that it be recorded on the Roll of Merit again."

Fireman John J. Price, of Engine Company No. 23, on January 27, at 3.35 P. M., at the fire which occurred in the five-story building No. 477 West Fifty-seventh street, at the northeast corner of Tenth avenue, rescued Mrs. Sarah Keator (aged

45), under the following circumstances: When the firemen arrived Mrs. Keator was standing on the sill of the fifth floor window and calling for help. Fireman Price ran up the stairs of the adjoining building and being prevented from descending thence to the fifth floor by the intense heat and dense smoke, he obtained a piece of rope and leaning over the cornice (which projected about three feet), he lowered the rope and directed the imperiled woman to fasten it around her body. When this had been done, Fireman Price, with the assistance of Christian Weiss (19 years old), hoisted Mrs. Keator to the roof from whence she was taken to the street. All other means of escape being cut off at the time, there is no doubt that Fireman Price's pluck and good judgment saved Mrs. Keator's life, and that he incurred considerable personal risk in making the rescue.

Assistant Foreman William Quirk, of Engine Company No. 22, on March 19, at 6.53 A. M., at the fire which occurred in the five-story building, No. 38 East Eighty-fifth street and Madison avenue, rescued three members of the Westlake family, under the following described circumstances:

Assistant Foreman William Ouirk (at the time commanding the company) himself took a scaling ladder, with it reached the fourth floor and placed it in a window of the fifth floor. Under his direction the two men (Frederick and Isaac Westlake) descended upon it to the fourth floor. At this time the flames burst out of all the windows of the third floor and prevented further descent by ladder. In the meantime Hook and Ladder Company No. 13 had arrived in response to the telegraphic (box) alarm, and as it was impossible to make use of its extension ladder in time, the life-saving net was resorted to, being held by the few available firemen, aided by a number of citizens. After Miss Westlake, who had been compelled to remain on the fifth floor, and her two brothers on the fourth floor, had, under Assistant Foreman's Quirk's direction and instruction, successively jumped and been safely caught in the net, Assistant Foreman Ouirk also jumped, and, although caught in the net, he

unfortunately bounded out of it, and falling upon the pavement broke an arm; the others sustained no injuries except those due to shock and slight burns. There can be no doubt that the lives of all would have been lost but for the prompt use of the life-saving net. Mrs. Westlake, the mother of the family, was killed by suffocation at the window of the fifth floor before she could be reached.

The Chief of Department stated in his report that the action of Assistant Foreman Quirk was one of the bravest and most meritorious that had ever been performed by a fireman in the service, and that notwithstanding the caution by Foreman Donohue (who attempted to follow him with a scaling ladder, and had to abandon it), to come down as the flames were coming out of the windows beneath him and that his escape would thus be surely cut off, Quirk resolutely refused to abandon his undertaking to reach the imperiled persons above him.

The Commissioners adopted the following resolution, which explains itself:

"Resolved, That as a slight reward of the heroism displayed by Assistant Foreman William Quirk, of Engine 22, in recently helping to save four lives at the risk of his own, and also as an additional evidence to the uniformed force that signal bravery will not be passed by unrecognized, the Fire Commissioners do hereby, subject to civil service examination, promote said William Quirk to the position of Foreman, and direct that upon his recovery from his injuries he be assigned to the command of Engine 49, on Blackwell's Island."

Having subsequently been duly examined and passed, Assistant Foreman Quirk was, in accordance with the resolution, promoted to the grade of Foreman on September 15.

Foreman James Nugent, commanding, Assistant Foreman Patrick Gormley, and Firemen 1st grade Thomas Larkin, Patrick H. Aspell and John J. Grady, all of Hook and Ladder Company No. 7, on April 24, at 10.05 P. M., at the fire in the four-story building, No. 158 East Twenty-eighth street, rescued

several people under circumstances described as follows in the official reports:

Upon the arrival of the force summoned by the alarm, the entire second story of the building was ablaze, the flames bursting through the windows both in front and rear and extending up the stairway, thus depriving the occupants of the floors above of all means of escape. Chief of Battalion John S. Fisher, seeing a woman (Mrs. Eliza Cook) at a third story window, had a ladder raised for her rescue, when Assistant Foreman Gormley and Firemen Larkin and Aspell ran up the ladder to her assistance. but before they reached her she disappeared from the window. and the officer and men followed through dense smoke and intense heat, and groping around found her overcome by heat and smoke, but still alive, in the rear part of the room, carried her to the stairway and down to an adjoining house where she subsequently died. Mrs. Cook's husband had, prior to the arrival of the firemen, jumped out of a rear window into the yard, where he was found severely injured. Just as the firemen arrived Catharine Mahoney (a cousin of Mr. and Mrs. Cook) dropped from a third-story front window to a balcony on the second floor, striking the iron railing of the balcony and falling thence into the street, breaking a leg and receiving other injuries. Foreman Nugent seeing another woman (Emily Waters) stand-. ing on the sill of a four-story window, apparently about to precipitate herself into the street, ran up the ladder, at the same time calling to her to remain where she was and that he would save her, and directed Fireman Grady to bring a scaling ladder, which they hooked into the fourth-story window from the top of the ladder before referred to, then Foreman Nugent climbed up the scaling ladder, followed by Fireman Grady, and assisted the woman down to the street uninjured. In all these cases it is reported that the rescuers were compelled to pass through flame issuing from the windows.

Chief of Battalion John J. Bresnan (Sixth Battalion), Chief of Battalion Joseph F. McGill (Third Battalion), Foreman Daniel

Bradley, commanding Hook and Ladder Company No. 9; Assistant Foreman James J. McCartney, of Engine Company No. 33; Fireman 1st grade Edward J. Lacey, of Engine Company No. 5; Fireman 1st grade Peter J. Bonner, of Engine Company No. 33; Fireman 1st grade Robert Wallace, of Engine Company No. 33; Fireman 1st grade Edward F. Hargrove, of Hook and Ladder Company No. 9, on June 13, at 12.38 A. M., at the fire in the four-story building No. 34 Second avenue, rescued nine people.

The building was on fire from cellar to roof up the stairway, and all the rooms were considerably charged with heat and smoke.

Chief of Battalion Bresnan (who had leave of absence at the time) rescued Mamie Miller (age 35 years), found unconscious on the third floor.

Chief of Battalion McGill rescued Bruno Wisnieski (age 9), found unconscious on the third floor.

Foreman Bradley, assisted by members of his company (Hook and Ladder Company No. 9), rescued Christina Wess (age 30), found unconscious on the third floor.

Assistant Foreman McCartney rescued Annie Wisnieski (age 7) and Bertha Wisnieski (age 4), found unconscious on the third floor.

Fireman Lacey, assisted by members of his company (Engine Company No. 5), rescued Charles D. Deyss (age 19), found unconscious and very severely burned on the fourth floor.

Fireman Bonner, assisted by Fireman Wallace, rescued Julia Clement (age 45), who was very severely burned and almost suffocated, and Thomas Clement (age 45), who was slightly burned and almost suffocated, from the fourth floor. Firemen Bonner and Wallace also assisted in the rescue of Mamie Miller, Bruno, Annie and Bertha Wisnieski and Charles D. Deyss, and Fireman Bonner is specially commended in the report for his brave and gallant rescue of Mrs. Julia Clement, heading all the rescuers by ladder and fire-escape to the fourth floor, and making the rescue at great personal risk.

Fireman Hargrove rescued Mary Wisnieski (age 33), found very severely burned and almost suffocated on the third floor, in which he was assisted by members of his company (Hook and Ladder Company No. 9).

Fireman 1st grade Dixon McQueen, of Engine Company No. 51, assisted by Firemen 1st grade William J. Cook and Patrick J. Brennan, on October 27, rescued from drowning a boy named Harman (age 11), at the foot of West Thirteenth street, who had fallen overboard. The rescue involved personal risk on the part of Fireman McQueen.

Life-saving Corps and School of Instruction.

Under instructions from the Board the Chief of Department issued the following:

BUREAU CHIEF OF DEPARTMENT, NEW YORK, May 5, 1888.

(General Orders No. 8.)

I.—The following resolutions adopted at a meeting of the Board of Commissioners, held on the 25th ultimo, are hereby promulgated for the information and guidance of the force:

Resolved, That each member of the uniformed force under the age of 40, who has not hitherto become a member of the Life Saving Corps, is hereby directed to either report on or before the 5th day of May, 1888, to Assistant Chief Hugh Bonner, at Headquarters, for instruction in the work of said corps, or else to file with the Chiefa written statement assigning any good reason on account of which he may apply for exemption from instruction in said work.

Resolved, That not later than May 12 next, on Monday, Tuesday, Wednesday, Thursday and Saturday of each week, the School of Instruction shall open and continue its work under such regulations as shall be prescribed by Assistant Chief Bonner; but not less than two of said days shall be devoted exclusively to company drills, and it shall be the duty of the instructor to cause to be kept a brief written record of the

efficiency or deficiency of the several companies shown while undergoing such instruction.

Resolved, That Assistant Chief Bonner is hereby authorized, after practically testing the same, to procure a "dummy" for use in drilling with the nets, a parachute, and such other articles as he may consider necessary for the use of the School of Instruction, and notice is hereby given that any person believing that he can suggest improvement in the apparatus, appliances, methods or drill of the Fire Department Life Saving Service, will, on application to the Chief or Assistant Chief, at Headquarters, be gladly afforded an opportunity of practically establishing the merits of his suggestions at the Department Drill Yard.

II.—In accordance with the foregoing resolutions, and with a view to facilitating the movements of companies while in actual service, and to systematize the same, a form of practice to include both branches of the force will be inaugurated, commencing on the 14th instant, and continuing during the months of May, June, September and October, under the supervision of the Assistant Chief of Department, commencing with the companies in numerical order.

The valuable service heretofore rendered by the School of Instruction, where the members of the force have been instructed in the handling and use of the life-saving appliances, implements, etc., has fully demonstrated the necessity for still further extending its usefulness by adding a third class, in the form of practice by companies, with apparatus fully equipped for service.

The practice ground connected with the School of Instruction affords an opportunity to the entire force to obtain a familiarity and knowledge of the recent improvements in apparatus, implements, tools, ladders, and the life-saving appliances, which are continually being added to the equipment of the Department.

Duplicates of every article, implement, etc., at present in use, or that may hereafter be provided for use in extinguishing fires, or for life-saving purposes, will be furnished for practice, and for the equipment of the School of Instruction.

It is, therefore, expected that a complete knowledge and familiarity with the uses and objects of the various implements, apparatus, life-saving appliances, and the improvements in the same (all of which are so essential to the successful operations of the Department), will, with a short period of practice and study, eradicate any defects now existing.

The movements to be selected are entirely practical, and should be familiar to every member of the force, as they are generally put in use by well-regulated companies while in actual service at fires, but in some instances different methods are resorted to to attain the same ends, and as a rule they result in unnecessary delays, and oftentimes in confusion, which should not exist.

To reduce these defects to a minimum, and to perfect the the service, is the object sought to be attained in adopting the following general method of the practice for the entire force.

The School of Instruction is located on the fifth floor of the Headquarters Building, and the practice ground attached to the School is located on East Sixty-eighth street, in the rear of the Headquarters Building.

During practice no persons will be admitted on the grounds without first obtaining permission from the proper authority.

Companies will take the most convenient route to the ground; the men may use other means of conveyance if it is found not practical for them to ride on the apparatus.

Soiled uniform, or parts of uniforms, or overalls, may be worn during practice. Absence from the grounds will not be permitted after reporting for practice.

Luncheon may be taken to the grounds. Leaves of absence will not be granted on practice days, until after returning to quarters.

The movements taught in the present course will be hereafter enforced when in actual service, and are subject to such modifications or amendments as may be deemed necessary.

Companies will report at practice ground fully equipped for service, with apparatus, at 10 o'clock A. M., when notified, which will be done through Headquarters of Chief of Battalion.

Chiefs of Battalion on receipt of notice will immediately notify the company commander, and also the relief detail, to take their place. If the relief detail is not in his battalion, he will notify the Chief of Battalion under whose command it is.

The double half hitch, rolling and bowline knots, having been found to be the best for Department uses, are adopted as the recognized knots of the Department, and all other methods of fastenings to hose, ladders and implements, are strictly prohibited.

## III. - Practice movements for Engine Companies:

1. Stretch line and make the following connections, with line ready for use. 2 and 4 way connections. Tapering hose. Cellar and sub-cellar pipes.

Revolving nozzle for cellar and roof service. Connect to pipe ladder by single and double lines.

- 2. Stretch line by stairway to roof. Back down and out of building.
- 3. Stretch line by stairway to the floor. Charge line. Move line to fourth, fifth and sixth floors. Back down and out of building.
- 4. Hoist line to fourth-story window, with sufficient hose to reach the sixth floor and roof. Make fast and charge line. Back down and out of building.
- 5. School of Instruction. General instruction in the use of life-saving implements, life nets, guns, missiles, lines, etc.
- 6. Take line by ladder to the fourth floor. Make line fast to ladder. Charge line, pipeman using the ladder belt. Move

line to sixth floor on inside of building. Back down and out of building.

- 7. Hoist line to roof and make fast. Charge line. Remove bursted length from line, under the cornice. Replace with good length; charge line. Back down.
- 8. Stretch line to roof by balcony platform, using scaling ladder in making connection to balconies. Connect all balconies with rope ladders. Make fast, and charge line. Back down.
- 9. Stretch to third balcony by rope ladder, make fast, and charge line. Move line by iron and rope ladders to fourth, fifth and sixth balconies and roof, and charge line. Back down.
- 10. Connect line to stand pipe by single and double lines for roof service. Hoist hose to roof, and make connection to end of stand pipe. Charge line. Back down.
- 11. Practice in the handling and use of shut-off, and other nozzles, hydrant connections and suctions. Engineers to operate and explain relief-valves, the amount of pressure used on line for ordinary duty, how the valve is cut off from operating, the means of reducing pressure on line without detaching line, the means of keeping engine operating during a temporary scarcity of coal, the object of using large suction, the hydrant nipple, and how and when used.

# IV.—Practice movements for Hook and Ladder Companies:

- I. Raise extension ladder full length, place it in position ready for service, connecting line to yoke if provided with such pipe, use guy ropes, etc. Lower the extension piece and the ladder to the ground or truck. The use of guy ropes in raising or lowering the ladders is prohibited.
- 2. Raise 50-foot extension ladder full length, place it in position ready for service. Lower extension piece and ladder to the ground.

- 3. Raise 45, 35, 30, 25 and 20 foot ladders, and place them in position ready for service.
- 4. Hoist 50-foot extension ladder to the roof. Lower ladder from roof.
  - 5. Hoist 45-foot ladder to the roof. Lower ladder from roof.
  - 6. Hoist 30-foot ladder to the roof. Lower ladder from roof.

#### SCHOOL OF INSTRUCTION.

- 7. Instruction in the use and handling of life-saving implements, life nets, guns, missiles, lines, etc.
- 8. Building a line of scaling ladders to roof. Lower ladders to ground.
- 9. Stretch line of three and one-quarter inch hose, connect to four way connection, with pipe, ready for service.
- 10. General practice with small ladders, pipe ladder, connecting by single and double lines, sub-cellar and cellar pipes, wire cutters, saws, roof lines, revolving nozzles, hose rollers, tapering hose, ram and wall cutters, branch yoke, etc.

V.—The companies at practice will be relieved in the manner hereinafter designated:

Engine Company No. 1 will be relieved by the 2d section of Engine Company No. 26.

Engine Company No. 2 will be relieved by the 2d section of Engine Company No. 26.

Engine Company No. 3 will be relieved by the 2d section of Engine Company No. 18.

Engine Company No. 4 will be relieved by the 2d section of Engine Company No. 12.

Engine Company No. 5, 1st section, will report for practice, 2d section relieve them.

Engine Company No. 6 will be relieved by the 2d section of Engine Company No. 27.

Engine Company No. 7 will be relieved by the 2d section of Engine Company No. 31.

Engine Company No. 8 will be relieved by the 2d section of Engine Company No. 16.

Engine Company No. 9 will be relieved by the 2d section of Engine Company No. 31.

Engine Company No. 10 will be relieved by the 2d section of Engine Company No. 12.

Engine Company No. 11 will be relieved by the 2d section of Engine Company No. 33.

Engine Company No. 12, 1st section will report for practice, 2d section relieve them.

Engine Company No. 13, 1st section will report for practice, 2d section relieve them.

Engine Company No. 14 will be relieved by the 2d section of Engine Company No. 5.

Engine Company No. 15 will be relieved by the 2d section of Engine Company No. 33.

Engine Company No. 16, 1st section will report for practice, 2d section relieve them.

Engine Company No. 17 will be relieved by the 2d section of Engine Company No. 33.

Engine Company No. 18, 1st section will report for practice, 2d section relieve them.

Engine Company No. 19 will be relieved by the 2d section of Engine Company No. 18.

Engine Company No. 20 will be relieved by the 2d section of Engine Company No. 13.

Engine Company No. 21 will be relieved by the 2d section of Engine Company No. 16.

Engine Company No. 22 will be relieved by the 2d section of Engine Company No. 16.

Engine Company No. 23 will be relieved by the 2d section of Engine Company No. 26.

Engine Company No. 24 will be relieved by the 2d section of Engine Company No. 13.

Engine Company No. 25 will be relieved by the 2d section of Engine Company No. 33.

Engine Company No. 26, 1st section will report for practice, 2d section relieve them.

Engine Company No. 27, 1st section will report for practice, 2d section relieve them.

Engine Company No. 28 will be relieved by the 2d section of Engine Company No. 5.

Engine Company No. 29 will be relieved by the 2d section of Engine Company No. 27.

Engine Company No. 30 will be relieved by the 2d section of Engine Company No. 27.

Engine Company No. 31, 1st section will report for practice, 2d section relieve them.

Engine Company No. 32 will be relieved by the 2d section of Engine Company No. 12.

Engine Company No. 33, 1st section will report for practice, 2d section relieve them.

Engine Company No. 34 will be relieved by the 2d section of Engine Company No. 26.

Engine Company No. 35.

Engine Company No. 36.

Engine Company No. 37.

Engine Company No. 38.

Engine Company No. 39 will be relieved by the 2d section of Engine Company No. 16.

Engine Company No. 40 will be relieved by the 2d section of Engine Company No. 26.

Engine Company No. 41.

Engine Company No. 42.

Engine Company No. 43.

Engine Company No. 44 will be relieved by the 2d section

of Engine Company No. 16.

Engine Company No. 45.

Engine Company No. 46.

Engine Company No. 47.

Engine Company No. 48.

Engine Company No. 49.

Engine Company No. 50.

Engine Company No. 51.

Engine Company No. 52.

Engine Company No. 53.

Engine Company No. 54 will be relieved by the 2d section of Engine Company No. 26.

Engine Company No. 55 will be relieved by the 2d section of Engine Company No. 13.

Hook and Ladder Company No. 1 will be relieved by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 2 will be relieved by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 3 will be relieved by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 4 will be relieved by the 2d section of Hook and Ladder Company No. 5.

Hook and Ladder Company No. 5, 1st section, will report for practice, 2d section relieve them.

Hook and Ladder Company No. 6 will be relieved by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 7 will be received by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 8 will be relieved by the 2d section of Hook and Ladder Company No. 5.

Hook and Ladder Company No. 9, 1st section, will report for practice, 2d section relieve them.

Hook and Ladder Company No. 10 will be relieved by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 11 will be relieved by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 12 will be relieved by the 2d section of Hook and Ladder Company No. 5.

Hook and Ladder Company No. 13.

Hook and Ladder Company No. 14.

Hook and Ladder Company No. 15 will be relieved by the 2d section of Hook and Ladder Company No. 5.

Hook and Ladder Company No. 16.

Hook and Ladder Company No. 17.

Hook and Ladder Company No. 18 will be relieved by the 2d section of Hook and Ladder Company No. 9.

Hook and Ladder Company No. 19.

VI.—Engine Companies Nos. 35, 36, 37, 38, 41, 42, 45, 46, 47, 48, 49, 50, 52 and 53, and Hook and Ladder Companies Nos. 13, 14, 17 and 19 will be provided by Chiefs of Battalion with spare apparatus, to be located in their respective quarters with a detail to perform duty during their absence at practice.

The following is taken from the reports upon the results so far obtained by the drills which were instituted under the foregoing orders, in conformity to the resolutions of the Board quoted therein:

It was found impossible to give more than one day to each company, because of the late commencement of the drills, a thorough explanation of the details of the practice, improvements in implements and tools being found necessary, and this, together with the drill proper, consumed about five hours per day.

The drills began on May 14 and were discontinued on June 19, because of the hot weather. During that period twenty-nine engine companies (mainly located south of Twenty-fifth street) were drilled as prescribed and instructed in the use of new and improved implements and tools. The drills were resumed on September 12 and continued to the end of October, thirty-four companies participating during that period.

The companies are rated as follows:

First Class—Found proficient and active: Engine Companies Nos. 4, 7, 10, 12, 14, 20, 24, 27, 29, 30, 31, 32, 33, 51

and 55. Hook and Ladder Companies Nos. 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13 and 16.

Second Class—Found deficient: Engine Companies Nos. 1, 5, 6, 8, 11, 13, 15, 16, 17, 19, 22, 23, 26, 34, 35, 36, 37, 38, 39, 44 and 54. Hook and Ladder Companies Nos. 2, 14 and 18.

Third Class—Found very deficient and slow: Engine Companies Nos. 2, 3, 9, 18, 21, 25, 28, 40, 47 and 53. Hook and Ladder Companies Nos. 12 and 15.

As a result of these drills and instructions, though so recently introduced, a marked improvement in the efficiency of the companies has been noticeable at large fires; and among the companies showing such improvement are several rated by the reports in the second and third classes, thus clearly demonstrating the great practical value of the system of instruction.

It is believed that within a reasonable time all of the companies will attain such proficiency as to entitle them to be rated in the first class.

The following recommendations were made:

That all men hereafter assigned to hook and ladder duty be not less than five feet eight and one-half inches in height and one hundred and sixty (160) pounds in weight, as many men were found in hook and ladder companies who were undersized, lacking in reach of arms and deficient in weight.

That Chiefs of Battalion be ordered to attend for instruction when notified on the days of their companies' practice.

That in the year 1889 there be two terms of practice, the first to begin on March 1 and end on June 15, and the second to begin on September 1 and end on November 30.

As directed in the first of the resolutions of the Board, quoted in the preceding order of the Chief of Department, all members of the uniformed force under the age of forty were instructed in the work of the Life-saving Corps, with exception of a small number who were exempted for good reasons, so that practically all under the age specified have now undergone this in-

struction, and out of the total membership of 1,025 only 346 now remain who have not passed through this course.

#### Casualties.

The number of human lives lost and persons injured at fires, and in responding to alarms for fires, are reported as follows:

		Отн	IERS.	
	MEMBERS OF THE DEPARTMENT.	Before Arrival of Department.	After Arrival of Department.	TOTAL.
Killed or fatally injured at fires	143	43 1 111 4	3  2	46 1 256 58
Aggregate	197	159	5	361

#### Rope Fire-escapes in Hotels.

Under the provisions of chapter 720 of the Laws of 1887, the uniformed force inspected all the hotels in the city over two stories high, and the Chief of Department reported the result to the Mayor, as the law requires. 254 hotels were thus inspected, of which number a re-inspection showed that 75 had not complied with the requirements.

Strength of Uniformed Force, Number of Fires, with Losses, Population, Number of Buildings, etc., from 1866 to 1887.

	Uni	RENGTH OF FORMED ORCE.	of Fires.	a'i	oss per Fire.	s Years.	Inhabit- ch Fire-	of Inhabit- each Fire.	of Buildings.	of Build- each Fire.
YEAR.	No. of Companies.	No. of Officers and Men.	Number of	Loss by Fire.	Average Loss	Population, Census	Number of Inlants to each man.	Number of ants to ea	Number of Bu	Number of I
1866 1867 1868 1869 1870 1871 1872 1873	54 54 52 52 52 52 52 52 52 52	*964 *919 592 599 596 596 596 651	796 873 740 850 964 1,258 1,649	\$6,428,000 00 5,711,000 00 4,342,000 00 \$2,696,393 00 2 120,212 00 2,127,356 00 2,891,818 00 \$4,022,640 00	\$8,0°5 38 6,541 81 5,867 57 \$3,172 23 2,199 39 1,691 06 1,753 67 \$2,735 48	†769,553	798	967	‡64,oco	80

<sup>\*</sup> Including about 400 volunteer firemen. † Estimate based on census of :865. ‡ Estimate based on report of Superintendent of Buildings, fourth quarter, 1875, and exclusive of sheds, bridges and piers.

	Uni	RENGTH OF FORMED ORCE.	Fires.	ڹ	Loss.	ıs Years.	of Inhabit- each Fire-	of Inhabit- each Fire.	f Buildings,	Build- ach Fire.
YEAR.	No. of Companies.	No. of Officers and Men.	Number of Fires	Loss by Fire.	Average Lo	Population, Census	Number of ants to eaman.	Number of ants to ea	Number of	Number of Build- ings to each Fire
1874 1875 1876 1877 1879 1880	64 67 63 65 65 64 65 66	*712 748 747 752 727 729 748 769	1,355 1,418 1,382 1,450 1,654 1,551 1,783 1,785	1,430,306 00 2,472,536 00 3,851,213 00 3,210,695 00 1,884,505 00 5,671,580 00 3,183,440 00 5,820,259 00	1,055 58 1,743 67 2,786 70 2,214 27 1,139 36 3,656 72 1,785 44 3,260 55	1,041,286	1,392	734	†84,200	59
1882 1883 1884 1885 1886 1837	67 68 70 71 71 74 74	826 895 919 927 951 960 1,040	2,001 2,169 2,405 2,479 2,415 2,929 3,217	4,195,960 oo 3,512,848 oo 3 474,547 oo 3,783,283 oo 3,340,810 oo 5,535,425 oo 5,485,922 oo	2,096 43 1,619 37 1,444 12 1,528 55 1,383 35 1,917 28 1,705 29	‡1,676,140	1,612	521	†102,624 †101,735  †104,250  \$112,000	5T 47  42  35
Total,	23 ye	ars	38,594	\$37,248,748 co	\$2,260 68					

The greatly disproportionate increase in number of fires to the growth in population, number of buildings, etc., since 1865. when the present system was inaugurated, is shown in the subioined statement:

,	1866.	1888.	PER CENT. INCREASE.
Number of fires	796	3,217	316.46
Population	796,533	1,676,140	110.43
Ratio of fires to populationI	to 967	1 to 521	84.7
Number of buildings	64,000	112,000	75
Ratio of fires to buildings	1 to 80	1 to 35	128.6
Ratio of firemen to fires I	to 1 ½	I to 3⅓	109.52

The population for 1888 is as estimated by the publishers of the City Directory, and the number of buildings for 1888, is estimated from the records of the Bureau of Inspection of Buildings.

It is a gratifying proof of the greater efficiency of the fire-extinguishing service that the average loss per fire, which was \$8,075.38 in 1866, has been reduced to \$1,705,29 in 1888, a decrease of 790 per cent.

<sup>\*</sup> Annexation of territory north and east of Harlem river, † Exclusive of sheds, bridges and piers. ‡ As estimated by the publishers of the City Directory. § As estimated by the Bureau of Inspection of Buildings.

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BUREAU OF FIRE MARSHAL.

Losses and Insurance.

The state of the s							
	January.	FEBRUARY.	Максн.	APRIL.	MAY.	JUNE.	јисх.
Estimated loss—							
On buildings and vessels	\$405,932 00	\$115,652 00	\$239,787 00	\$99,163 00	\$53,4co co	\$137,470 00	\$64,866 00
On contents	1,067,366 00	362,773 00	541,512 00	292,323 00	oo 189'091	275,460 00	262,807 00
Total	\$1,473,298 co	\$478,425 00	\$781,299 00	\$391,486 oo	\$214,0SI OO	\$412,930 oo	\$327,673 00
Estimated insurance—							
On buildings and vessels	\$3,800,955 00	\$2,676,170 00	\$2,367,150 00	\$1,699.150 co	\$1,233,100 00	\$1,537,650 00	\$1,970,375 00
On contents	3,282,560 co	1,572,030 00	co 578,871 oo	1,005,250 co	932,086 00	856,470 00	2,207,025 00
Total	\$7,083,515 00	\$4,248,200 00	\$4,107,025 00	#2,704,44c oo	\$2,165,186 oo	\$2,414,120 00	\$4,177,400 00
Estimated uninsured loss.							
On buildings and vessels	%I,170 00	co z66≇	\$120,622 00	\$€00 00	\$195 oo	\$3,415 co	\$4,325 00
On contents	co 586'£1	6,893 00	30,889 00	20,902 00	16,532 00	42,613 00	22,435 co
Total	\$15,105 00	\$7,885 oo	£151,511 00	£21,502 co	\$16,747 oo	\$46,028 00	\$26,760 00
Average loss per fire.	\$3,887 33	\$1,649 74	\$2,741 40	\$1,383 34	\$943 I8	\$1,514 82	\$1,008 22
the state of the s	-	-				-	-

Losses and Insurance—(Continued).

beautifued diffe fleetife of the selfs, fleeting the control to control to the selfs of the self						The second secon
	August.	SEPTEMBER.	Остовек.	Nоvемвек.	<b>D</b> есемвек.	YEAR.
Estimated loss—						
On buildings and vessels	\$206,360 00	\$33,260 00	\$27,690 00	\$58,120 00	\$125,430 00	\$1,567,630 00
On contents	196,105 00	88,607 co	139,646 00	303,545 00	227,467 00	3,918,292 00
Total	\$402,965 00	\$121,867 oo	\$167,336 co	\$361,665 00	\$352,897 00	\$5,485,922 co
Estimated insurance—						
On buildings and vessels	oc oo1,860,1\$	\$1,155,500 00	\$1,176,100 00	\$1,155,500 00 \$1,176,100 00 \$1,971,966 00 \$2 906,800 00 \$23,613,616 00	\$2 905,800 co	\$23,613,616 00
On contents	977,832 00	605,935 00	1,128,615 00	00 00292 00 1 636,700 00	oo co2,986 I	18,112,513 00
Total	\$2,076,532 00	\$1,761,435 00	\$2,304,715 00	\$3,840,051 oo	\$4,843,500 00	\$41,726,129 co
Estimated uninsured loss—						
On buildings and vessels	\$40,030 00	\$800 00	\$2,415 00	\$1,390 co	\$21,270 00	\$197,224 co
On contents	17,285 00	5,335 00	9,675 00	6,723 ∞	32,773 00	226,010 00
Total	\$57,315 00	\$6,135 00	\$12,090 00	\$8,113 00	\$54,043 00	\$423,234 00
Average loss per fire.	\$1,735 92	\$638 05	\$880 71	\$1,545 58	\$1,142 05	\$1,705 29

Extent of Loss at Fires.

1			ires.	;	,,	,,	"	**	,,	*	**	;	"	s	,,	;	;	3	,,	"		
Loss Less Than—			\$100 at 2,173 fires.	1,000 at 2,845	5,000 at 3,094	10,000 at 3,150	20,000 at 3,172	30,000 at 3,187	40,000 at 3,195	50,000 at 3,198	60,000 at 3,202	70,000 at 3,203	80,000 at 3,2c4	90,000 at 3,206	100,000 at 3,208	125,000 at 3,211	150,000 at 3,213	200,000 at 3,214	250,000 at 3,215	300,000 at 3,216		
PERCENTAGE TO WHOLE NUMBER OF FIRES.	•35	.23	63.	.21	70.																	
YEAR.	1,148	740	285	672	249	26	22	15	∞	3	4	н	н	63	64	3	63	н	I	н	н	3,217
DEC. YEAR.	107	99	33	71	21	4	8	33	ī	:	:	:	:	:	:	1	:	:	:	:	:	309
Nov.	82	49	15	48	30	9	н	н	:	:	:	:	:	I	:	п	:	:	:	:	:	234
Ocr.	63	40	61	47	14	3	3	:	:	:	1	:	:	:	:	:	:	:	:	:	:	190
SEPT.	29	46	21	42	15	3	н	:	:	н	:	:	:	:	:	:	:	:	:	:	:	161
Aug.	66	63	14	36	13	63	N	63	:	:	:	:	:	:	:	:	:	:	:	н	:	232
MAY. JUNE. JULY. AUG.	611	94	24	49	20	3	3	:	I	:	н	:	:	:	:	н	:	:	:	:	:	325
JUNE.	108	62	28	53	13	3	:	:	01	н	н	:	:	:	:	:	:	I	:	:	:	272
MAY.	87	46	91	44	19	12	н	н	ı	:	:	:	:	:	:	:	:	:	:	:	:	227
APR.	100	29	22	89	21	4	3	1	:	:	:	:	:	:	н	:	н	:	:	:	:	283
MAR.	109	49	28	19	24	4	н	w	Н	I	:	н	:	:	:	:	:	:	н	:	:	285
FEB.	87	69	19	75	28	4	4	н	н	:	:	:	:	:	н	:	I	:	:	:	:	290
JAN.	125	94	36	78	31	∞	н	н	п	:	н	:	н	н	:	:	:	:	:	:	1	379
	Nominal or less than \$10	d 50	Ico	1,000	5,000	10,000	20,000	30,000	40,000	50,000	60,000	70,000,07	80,000		100,000	125,000	150,000	200,000	250,000	300,000	:	
	l or less t	pue or\$ u	50 "	,, 001	,, 000'I	2,000	,, 000'01	20,000	30,000	,, 000'0+	50,000	,, 000,09	,, 000,07	,, 000'08	,. 000,06	,, 000,001	125,000 "	150,000 "	,, 000,002	250,000 "	Over 1,000,000	Total.
	Nomina	Between	:	"	"	**	:	33	,,	"	7.	,,	,,	;	"	:	"	"	;	;	ver I,	

### Origin and

						-
			Caus	E.		
Origin.	Accidental.	Carelessness.	Defective Building and Construction.	Mischievousness.	Maliciousness.	Incendiarism.
In Heating.						
Beams built into chimneys and fireplaces			10	.,		\
Chimneys, fireplaces, flues, grates, etc			71			
Foul chimneys		163				
Gas stove igniting woodwork, etc		x				8
Kerosene-oil used in lighting fires		4				
Soot in flues and fireplaces igniting wood-work		36			••	
Sparks from stoves, chimneys, stove pipes, etc., igniting woodwork, clothing, etc	30	23				
Steam-pipes igniting floor beams, wood- work, etc	3	1		1		
Stove, boilers, furnaces, stove and heater pipes igniting bedding, clothing, woodwork, etc	82	137				
Stoves, furnaces and grates, hot coals alling from	28	4				1
Stoves upsetting	3	3				)
Water-back of range bursting	3					}
Total number of fires	149	372	81			
Total loss	\$210,314	\$46,836	\$59,132			}
In Illuminating.						
Calcium lights,	2					
Electric lights, sparks from	40					
Gas, explosion of	2	1				••
Gas-meters, explosion of	ı					
Gas escaping and igniting	21	41				
Gas-lights, candles, lamps, etc., igniting merchandise in stores, show-windows, and bedding, straw, woodwork, rubbish, etc	12	271				••
Lamps, kerosene-oil, breaking	2					

# Cause of Fires.

Caus	Е.	1	Prez	uises	WH	EREI	n Fii	re O	RIGIN	NATE	ОС	CUPI	ED	AS—	-	ents.
Not Ascertained.	Total.	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Offices.	Restaurants and Saloons.	Storehouses.	Stables.	Places of Amusement and Recreation.	Religious and Educa- tional Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
	10	8	I	I											10	\$35,060
	71	57	3	6	I	1	• •	1	2					••	71	24,097
	163	156		4	2	I								••	163	50
	I		I											• •	1	*******
	4	4			••						••				4	30
	36	30	1	3	1	I									36	30,9€5
	53	27	7	12		1	1	2		I		٠.		2	53	21 714
	4		2	I	1										4	90
	219	172	9	21	7	4		I			1	1	ı	3	219	64,552
	32	21	2	5	I			ı					1	1	32	149,199
	6	3		2	1										6	17,495
	3	2	••				••	٠		1	••		••		3	80
	602	480	26	55	14	8	ı	5	2	2	1	1	2	5	602	
		••			••			••		••						\$315,332
	2								2						2	
1	40	6	12	6	4	6			I			1		4	40	\$52,165
	3	1												2	3	25
	1	1													1	
1	63	36	10	9		4			1	1				2	63	48,632
	283	213	28	21	2	5		5		6			I	2	283	111,131
	2	2													2	1,100

			CAUS	E.		_
Origin.	Accidental.	Carelessness.	Defective Building and Construction.	Mischievousness.	Maliciousness.	Incendiarism.
Lamps, kerosene-oil, exploding	221	ı				
Lamps, kerosene-oil, falling	22	23				
Lamps, kerosene-oil, upsetting	17	49			I	
Lamps, kerosene-oil, taking fire	2					
Matches, lighted tapers, etc., igniting a clothing, woodwork, rubbish, etc		119				
Total number of fires	342	. 505	)		I	
Total loss	\$167,340	\$275,706			\$12	
2010. 1052	===					
In Manufacturing and Other Business.						
Alcohol, tar, gum, oils, paints, varnish, etc., igniting on stoves, furnaces, over gas-lights, etc	37	4				
Chemicals igniting	1	••	••	••		••
Charcoal fire igniting woodwork	••	I	••	••		••
woodwork	• •		13	••		••
Electric wires, defect in insulation	I	••			••	••
Foul chimneys	••	10		••	••	••
Friction of machinery	9	••		••		••
work, paper, merchandise, etc Hams, meats, etc., in ovens and smoke-	7	I			••	••
houses, igniting	5	••		••		••
chandise, etc	2	2		••		
fire, etc	2					
Lamp, alcohol, taking fire, upsetting, bursting, etc	3			••		
Lime, slaking of	14					••
Naphtha and benzine vapor igniting	8	I	••	••		••
Phosphorus igniting	I				/	
Scenery in theatres igniting from gas-) lights, etc	I	3				
engines, steamships, locomotives, etc., igniting roofs, shavings, woodwork, etc	105	20				••

Caus	Е.			EMISE	s W	HERE	IN F	IRE (	Origi	NATE	ED O	CUL	PIED	AS		tents,
Not Ascertained.	Total.	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Offices.	Restaurants and Saloons.	Storehouses.	Stables,	Places of Amusement and Recreation.	Religious and Educa-	Lumber, Coal and Wood Yards.	Piers, Docks, etc,	Vessels,	Miscellancous,	Total,	Aggregate Loss to Structures and Contents.
	222	203	3	5				ı					r	4	222	\$34,848
	45	39		3				2					I		45	14,375
	67	5.1	2	7				3	ı	1			T	T	67	46,703
	2	2													2	85
	119	69	II	21		ı		14	I	I		1			119	140,709
I	849	628	66	72	6	16		25	6	9		2	4	15	849	
\$6.715	)															\$449,773
===			=	=	=	=	==	-	=	=		=	=	=		
	41	3	3	21		7							2	3	41	\$61,295
ı	2			2											2	525
	ı			1										)	r	300
/	13		1	12							I				13	28,325
1	ī				I										ı	4,500
	10	2		5		3									10	
	9		ı	8											9	136,880
	8	1	2	4		r									8	111,612
	5			5					••						5	1,035
	4	I		2										1	4	150
	2			2											2	2,075
1	3	I		2											3	250
	14	2	3								3			6	14	2,121
	9			9											9	1,405
	I			I											ı	
	4		••		••	}			4						4	
	125	23	19	51	1	8		I			ı		3	18	125	494,889
	14	I	2	ıı											14	126,775

			Causi	S.	`	
Origin.	Accidental.	Carelessness.	Defective Building and Construction.	Mischievousness.	Maliciousness.	Incendiarism.
Spontaneous combustion of oily rags, etc Stoves, boilers, furnaces, ovens, etc., igniting merchandise, shavings, etc	37 41	6				
Stoves, furnaces, etc., hot coals falling from	14	9	• 1			
Stoves upsetting	I					
Vitriol, acids, spirits, etc., carboys of, breaking or vapor igniting	3			••		• •
Total number of fires	303	89	13			
Total loss	\$1,095,288	\$350,945	\$28,325		••	••
Miscellaneous.  Alcohol stove taking fire	I					
Benzine, alcohol, vapor igniting, etc	2	2	]			
Bonfires and sparks from	3	2		14		
Cigars, pipes, etc., smoking of		229	}	I	3	
Defective flues and chimneys			12			
Fat, glue, varnish, etc, taking fire on stoves, etc	15	3				
Firecrackers		37		17		
Fireworks, rockets, etc	1	32			§	
Foul chimneys	1	19				
Gas stoves, etc	2	3				
Hot ashes igniting woodwork	r	29				
Kerosene-oil poured over woodwork, bedding, etc., and ignited	••			••	1	2
goods, etc	I	1	)	••		
Kerosene-oil stoves exploding	2			••	••	
Kerosene-oil stoves upsetting	6	11				
Kerosene-oil stoves taking fire	80				••	••
Lightning igniting building, lumber, etc.	2	••		••	••	
Matches, children playing with	• •	••		164	••	
Matches gnawed by rats and mice	••	36				

ents.		AS—	ED .	Iquo	Осо	ATEI	RIGIN	RE O	n Fi	EREI	WH	MISES	Pre		SE.	CAUS
Aggregate Loss to Structures and Contents.	Total.	Miscellaneous.	Vessels.	Piers, Docks, etc.	Lumber, Coal and Wood Yards.	Religious and Educa- tional Institutions.	Places of Amusement and Recreation.	Stables.	Storehouses.	Restaurants and Saloons.	Offices.	Manufactories and Workshops.	Mercantile Establishments.	Dwellings.	Total,	Not Ascertained.
\$150,715	43	ı	4									30	5	3	43	
39,470	70	ı	3			••				9		42	1	14	70	
302,740	23	2				I	ı	1		ı		7	2	8	23	
ı	ı											1			ı	
10	3											2	1		3	
	406	32	12		5	1	5	2		29	2	218	41	59	406	I
\$1,475,073							,									\$515
		=	=	=	=		=			=	=		==	==	===	
6.40														1	ı	
\$150 75	1		••			••					••			4	4	
5,135	16	13						1						2	16	
540,754	233	4	ı	2	4	3 1	5	17		13	8	58	30	88	233	
2,265	12							ı						11	12	
2,795	18											ı	ı	16	18	
1,521	54	1		1		]	ı					. 5	2	44	54	
5,140	34	3						I		2	I	2	4	21	34	1
10	19												1	13	19	)
55	5													5	5	
41,485	30		ı					ı			2	6	3	17	30	
\$200	3					}					}			3	3	
355	2					]						]		2	2	
29,160	2											ı		I	2	1
195	17					ı						1		15	17	
8,868	80	I	ı		٠.							3	2	73	80	
14,400	2											2			2	
33,653	164	2				ı		5				2	2	152	164	
49,660	36			ı			2			2	I	70	6	14	36	

			Caus	E.		
Origin.	Accidental.	Carelessness.	Defective Building and Construction.	Mischievousness.	Maliciousness.	Incendiarism.
Matches igniting awnings, straw, rub- bish, woodwork, etc	14	305		35	15	32
Not ascertained						
Phosphorus igniting	. 1	2	]			;
Rekindling of previous fire						
Sparks from distant fire	. I					
Sparks from chimneys, stoves, etc	. 3	ı				
Sparks from fire engine	. 3			••		
Spontaneous combustion of oily rubbish, etc	3	I				
Stoves upsetting	1				)	
Stoves, stove pipes, etc., heat from igniting woodwork, etc	8	8	•••			
Sulphur igniting clothing, etc		. т				
Thawing out water-pipes with candles, lamps, lighted paper, etc		48 5				
Total number of fires	. 148	775	12	231	19	34
Total loss	. \$62,751	\$1,074,866	\$2,265	\$37,365	\$4,971	\$36,071
RECAPITULATION.						
(Number of fires	. 149	37 <sup>2</sup>	81		1	
In Heating	\$210,314	\$46,886	\$59,132		1	
(Number of fires		505	****		I	
In Illuminating	\$167,340	\$275,706			\$12	
(Number of fires	303	89	13			
In Manufacturing, etc. \\ Loss	. \$1,095,288	\$350,945	\$28,325			
(Number of fires	. 148	775	12	231	19	34
In Miscellaneous Loss	. \$62,751	\$1,074,866	\$2,265	\$37,365	\$4,971	\$36,071
Aggregate (Number of fires		1,741	106	231	20	34
(Loss	. \$1,535,693	\$1,748,403	\$89,722	\$37,365	\$4,983	\$36,071

Cause	.		Pren	MISES	WH	EREI	N FIS	re O	RIGIN	ATE	о Ос	CUPI	ED .	AS—		ents.
Not Ascertained.	Total.	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Offices.	Restaurants and Saloons.	Storehouses.	Stables.	Places of Amusement and Recreation.	Religious and Educa- tional Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total,	Aggregate Loss to Structures and Contents.
	401	247	38	57	9	6		23		2	1		2	16	401	\$468,298
139	139	58	24	40	3	3	1	6	2	1			1		139	2,026,127
	3	3													3	
ı	1						I								1	3
	1									ı					I	300
	4	4													4	1,015
	3		1	I		1									3	65
	4	3			ı										4	70
	ı	1													1	15
	16	13		3											16	295
	2	2													2	1,400
	48	34	4	5	1	1		2						I	48	11,257
	5	I		2				1		1				1	5	13
141	1,350	853	118	199	26	28	2	58	10	9	5	4	6	42	1,360	
\$2,025,455							•••			••						\$3,244,744
	602	480	26	55	14	8	1	5	2	2	1	1	2	5	602	à
	••															\$316,332
1	849	628	66	72	6	16		25	6	9		2	4	15	849	
\$6,715										• • •						449,773
1	406	59	41	218	2	29		2	5	1	5	••	12	32	406	
\$515																1,475,073
141	1,350	853	118	199	26	28	2	58	10	9	5	4	6	42	1,360	
\$2,026,455		••	••	••	••	··· i	·;	••		••		••				3,244,744
143	3,217	2,020	251	544	48	81	3	50	23	21	11	7	24	94	3,217	
\$2,033,685																\$5,485,922

# Origin (Consolidated) and Cause

				CAI	USE.			
Origin by Months.	Accidental	Carelesssness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.	Not Ascertained.	Total.
In Heating.								
January	38	66	17					121
February	18	52	13					83
March	22	55	8					85
April	11	48	6					65
May	6	29	8					43
June	5	19	3					27
July								
August	,							
September	5	13	5					23
October	12	16	6					34
November	8	29	3					40
December	24	45	12					81
Total	149	372	81					602
In Illuminating.								
January	31	69	}					100
February	25	49						74
March	23	46						69
April	33	38						71
May	35	32						67
June	28	46						74
July	26	33						59
August	29	37						66
September	24	38						62

of Fires, by Months.

Ī			Premise	es W	HERE	IN F	IRE (	Origina	ATED C	ОСССРІЕ	D AS-	_			ents.
	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Offices.	Restaurants and Saloons.	Storehouses.	Stables,	Places of Amusement and Recreation.	Religious and Educational Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
												I			
	94	7	11	5	I		1				1		1	121	\$51,107
	70		7	ı	1		2			I			1	83	42,807
	64	5	9	3	I		I						2	85	50,964
-	58	1	5		I									65	7,447
Ì	42	1												43	2,675
1	21	I	2	1	1	I								27	3,545
1			}												•••••
1	21		2											23	2,155
1	28	2	4											34	4,030
	27	3	4	1	1		1		2			1		40	5,310
١	55	6	11	3	2			2				1	I	81	146,292
:	480	26	55	14	8	1	5	2	2	1		2	5	602	\$316,332
1															
ı	74	5	9		2		4	I	1			1	3	100	\$63,383
	47	7	12	1	1		3		2			1		74	50,573
ļ	53	4	4	1			4				1		2	60	44,447
-	59	4	2				3	I	ı				ı	71	10,512
-	51	5	9	1			I							67	105,827
-	65	3	2		2		1		1					74	16,622
	46	3	4				2		2				2	59	51,305
	46	7	7	2	2			1					r	65	27,567
1	45	3	4		3		3		2		1		1	62	16,595

				Cat	USE.		_	
ORIGIN BY MONTHS.	Accidental.	Carelessness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.	Not Ascertained.	Total.
October	22	38					1	60
November	32	31		/				63
December	34	48			ı		ı	84
Total	342	595			1		ı	849
In Manufac!uring and other Business.								
January	27	7	2					36
February	31	7						38
March	23	7	3					33
April	24	9						33
May	19	8	1				1	29
June	34	7	2	}	••.			43
July	25	6	3					34
August	33	13	1					47
September	25	5		)				31
October	20	5	1	/				26
November	22	6						28
December	19	9	]					28
Total	303	89	13	••			1	405
Miscellaneous.								
January	9	72		21	ı	5	14	122
February	8	51		18	I	6	11	95
March	3	65		14	ı	4	10	98
April	11	64		25	ī	2	10	114
May	15	46		12	3	4	8	88

		]	Premise	s W	HERE	is F	IRE (	RIGINA	ATED O	CCUPIE	D AS-	_			ents.
	Dwellings.	Mercantile Establishments.	Manufactories and Workshops.	Office s.	Restaurants and Saloons.	Storehouses.	Stables.	Places of Amusement and Recreation.	Religious and Educational Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
	40	6	8		2		ı	ı					2	60	\$18,605
	46	6	5		2			1				r	2	63	27,743
ı	56	13	6	I	2		3	I				I	ı	84	16,594
	628	66	72	6	16		25	6	9		2	4	15	849	\$449,773
				_		=	=		==	=	=	=	=	-	
	6	ı	27		I							ı		36	\$129,685
	6	4	21		2		I	r				ı	2	38	133,200
	4	4	18		ı					ı			. 5	33	471,580
	7	4	19					1				ı	ı	33	188,430
	7	3	13		2			2		r			ı	29	21,607
	9	3	21		8								2	43	12,690
	4	2	24					2				1	2	34	14,745
	3	6	16		4		I		1	2		3	11	47	301,718
	4	3	17		4					I		. 2		31	9,470
	3	3	15	I	2							2		26	20,625
	4	5	14	ı								ı	3	28	147,807
	2	3	13	••	5								5	2.8	23,516
	59	41	218	2	29		2	5	I	5		12	32	406	\$1,475,073
											=				
	80	13	18	4	3		2					ı	ı	122	\$1,229,123
	62	4	17	4	2		3	2					I	95	251,845
	55	7	20	2	I		7	I	I			ı	3	98	214,308
	67	10	18	2	3		7	••	••			1	6	114	185,097
	52	5	11	3	3	••	8	I		1			4	88	83,972

				CAU	JSE.		_	,
Origin by Months.	Accidental.	Carelessness.	Defective Buildings and Construction.	Mischievousness.	Maliciousness.	Incendiarism.	Not Ascertained.	Total.
June	18	61		31	3	4	11	128
July	29	144	8	31	3	3	14	232
August	23	67	4	14	1	2	8	119
September	11	37	••	10		I	16	75
October	11	41		9	ı	1	7	70
Novemler	8	54	••	23	2	ı	15	103
December	2	72		22	2	1	17	116
Tota!	148	775	12	231	19	34	141	1,360
RECAPITULATION.								
In Heating	149	372	81	••				602
In Illuminating	342	505			ı		ı	849
In Manufacturing and other) Business	303	89	13				1	406
Miscellaneous	148	775	12	231	19	34	141	1,360
Total	942	1,741	106	231	20	34	143	3,217

		Premise	s W	HERE	in F	IRE (	RIGINA	ATED O	CCUPIE	D AS	_			tents.
Dwellings.	Mercantile Establishments,	Manufactories and Workshops.	O.fices.	Restaurant; and Saloons.	Storehouses.	Stables.	Places of Amusement and Recreation.	Religious and Educational Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Total.	Aggregate Loss to Structures and Contents.
93	12	10	ı		2	5	I					4	128	\$380,073
179	11	20	2	3		5	I	ı	3	ı		6	232	261,623
72	8	21	ı	5	,	7		2				3	119	73.680
49	7	II	2	2		3				1			75	93,647
36	. 9	9		2		4	3	ı	I	ı	ı	3	70	124,076
50	16	16	2	2		6	ı	ı		ı		8	103	180,805
58	16	28	3	2		I		3			2	3	116	166,495
853	118	199	26	28	2	58	10	9	5	4	6	42	1,360	\$3,244,744
												=		
480	26	5.5	14	8	1	5	2	2	I	ı	2	5	602	\$316,332
628	66	72	6	16		25	6	9		2	4	15	849	449,773
59	41	218	2	29		2	5	ı	5		12	32	406	1,475,073
853	118	199	26	28	2	58	10	9	5	4	6	42	1,360	3,244,744
2,020	251	544	48	81	3	90	23	21	11	7	24	94	3,217	\$5,485,922

Origin of Fires by Districts and Months. First District—Part of City lying South of Chambers Street.

	Total.	\$151,085	84,260	9,685	50,042	21,015	15,548	10,460	4,170	30,384	7,440	58,685	24,117	\$463,891	21 2 21 2 21
	1	\$1												4	:e::
Loss.	Contents.	\$106,645	69,580	7,735	36,422	18,615	11,490	8,350	2,485	25,909	5,840	39,375	21,182	\$353,628	to each fire places to each to each fire
	.egnibling	\$44,440	14,680	1,950	13,620	2,400	4,058	2,110	1.685	4,475	009'1	016,310	2,935	\$110,263	Number of dwellings to each fire Number of business places to each fire
RES.	Total.	25	29	52	23	14	19	15	61	91	7	91	24	233	nber of nber of fire
F F1	Other Places.	н	:	:	:	н	:	:	n	:	:	01	8	00	Numl Numl fi
NUMBER OF FIRES.	Business.	8	22	61	18	II	81	12	14	14	9	13	18	185	
NUN	Dwellings.	4	7	7	Ŋ	N	н	m	n	ca)	н	н	4	40	85 85
trs.	Total.	91	13	7	14	Ŋ	9	7	01	25	н	11	OI	105	dings
ANEO	Other Places.	н	:	:	:	н	:	:	н	:	:	:	н	4	gs
MISCELLANEOU'S.	Business.	13	6	9	12	4	9	4	9	N	r	11	6	85	vellin siness rildin
Mis	Dwellings.	(1)	4	н	01	:	:	es.	3	:	:	:	:	15	in dv in bu
AND S.	Total.	4	9	4	Ŋ	3	œ	9	25	9	4	N	3	56	Number of fires in dwellings  Number of fires in business buildings  Total fires in buildings
TURING	Other Places,	:		:	:	:	:	:	ı	:	:	н	:	N	mber comber of
MANUFACTURING AND OTHER BUSINESS.	Business.	4	9	4	'n	3	7	9	4	9	4	н	ю	53	ZZ
In M.	Dwellings.	:	:	:	:	:	н	:	:	:	:	:	:	H	ration in 1885— 1,012 3,805 4,817
, S	Total.	8	4	7	N	4	-	81	4	4	:	3	∞	41	188
In Illuminating.	Other Places.	:	:	:	:	:	:	:	:	:	:	н	н	8	ion ii
CLUMI	Business.	н	4	Ŋ	н	3	н	(1)	4	3	:	н	co	28	nerat
I'n I'	Dwellings.	н	:	8	Η.	н	:	:	:	н	:	н	7	H	enur
/5	Total.	n	9	œ	8	01	4	:	:	ı	8	:		31	s per
In Heating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ict, a
HE,	Business	6	3	4	:	н	4	:	:	:	н	:	m	81	distr
In	Dwellings.	н	3	4	8	н	:	:	:	н	н	:	:	13	gs in
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration in 1885—1 Dwellings Businers 3 Total

Second District—Part of City lying between Chambers and Houston Streets, West of West Broadway and South Fifth Avenue,

		355	5,760	15	2,680	:	135	595	975	5,475	7,715	1,025	235	591	DI.
	Total.	\$2,855	5,7	80,015	7,6			-,	0.	,,	7.7	1,0		\$112,465	fire 21
Loss.	Contents.	\$2,380	4,005	61,480	6,785	:	85	395	999	3,695	6,515	515	OII	\$86,630	Number of dwellings to each fire  Number of business places to each fire.  Number of buildings to each fire
	Buildings.	\$475	1,755	18,535	895	:	50	200	310	1,780	1,200	210	125	\$25,835	dwellings t business pla buildings to
RES.	Total.	01	II	13	81	4	11	15	12	9	10	01	7	122	er of
F FII	Other Places.	н	01	H	64	н	:	н	н	:	:	н	:	IO	Vumb Vumb Vumb
SER O	Pusiness.	n	4	9	۱۸	:	4	25	8	3	3	20	н	54	———
NUMBER OF FIRES	Dwellings.	9	v,	9	11	3	7	6	∞	m	Ol	4	9	102.	70 42
us.	Total.	m	н	3	9	(1)	7	11	4	01	н	33	rs.	46	ldings
NNEO	Other Places.	:	:	:	н	н	:	:	:	:	:	:	:	1 8	gss s buil
MISCELLANEOUS.	Business.	н	:	3	3	:	С	3	:	ı	I	I	:	16	relling sines
Misc	Dwellings.	01	н	:	8	н	4	<sub>∞</sub>	4	н	:	81	m	88	in dw in bu in bu
AND	Total.	:	r.	н	ı	:	н	m	6	:	:	61	:	141	Number of fires in dwellings 70 Number of fires in business buildings 42 Total fires in buildings 112
Manufacturing and Other Business.	Other Places.	:	I	:	1	:	:	н	H	:	:	н	:	20	imber o
INUFAC	Business.	:	н	I	:	:	ı	8	61	:	:	н	:	00	
In M.	Dwellings.	:	н	:	:	:	:	:	:	:	:	:	:	н	3,420
.NG.	l'otal.	01	4	C)	10	н	:	64	20	2	3	01	н	800	1885-
IN ILLUMINATING.	Other Places.	:	H	:	:	:	:	:	:	:	:	:	:	н	on in
LLUM	Business.	:	3	н	н	:	:	:	н	н	8	н	:	IOI	erati
In	Dwellings.	6	:	н	4	н	:	н	4	Н,	н	н	н	17	enum
.:	Total.	ν	3	7	. 9	н	n	:	:	2	н	3	3	34	per
In HEATING.	Other Places.	н	:	H	:	:	:	:	:	:	:	:	:	N	ict, as
HE	Business.	N	:	н	н	:	:	:	:	н	:	7	H	00	distri
Z	Dwellings.	N	3	Ŋ	Ŋ	н	co	:	:	ь	н	н	01	42	gs in
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration in 1885- Dwellings. Business Total

Third District -Between Chambers and Houston Streets, West Broadway and South Fifth Avenue, and Crosby, Elm and Centre Streets.

MISCELLANEOUS. NUMBER OF FIRES. LOSS.	Other Places. Total. Dwellings. Business. Other Places. Total. Buildings.	8 2 10 1 13 \$288,040 \$841,105 \$1,129,145	2 5 5 560 650	5 6 I IC I 12 8,985 104,9c0 113,885	3 4 I 5 6 IO,550 '87,650 98,300	t 4 2 4 6 2,4co 18,335 20,735	I I 75 I T T T T T T T T T T T T T T T T T T	6 2 7 I IO 2,000 56,760 58,760	t 4 8 8 22,575 24,125	I I I CO	3 3 I 4 5 4,000 32,600 3 <sup>6</sup> ,00	t 4 8 8 7,600 127,431 135,031	5 5 2 11 13 5,485 38,625 44,110	89 \$330,985 \$1,330,631 \$1,661,616	Number of fires in dwellings 12 Number of dwellings to each fire 28  Number of fires in business buildings 74  Number of business places to each fire 18
Miscel	Dwellings.	1 7		•	т 3	:	:	4	:	н 		4	:	4 43	n dwell n busin
	Total.	н		•	:	<u>·</u>	H	-	н	<u>:</u>		н	· :	00	fires in
In Manufacturing and Other Business.															per of
CTUR	Other Places.	:	:	:	<u>:</u>	<u>:</u>	:	_: 	:	:	:	:	:	:	Num
MANUFACTURING OTHER BUSINESS.	Business.	-	8	:	:	:	н	H		:	-	н	:	∞	
In M	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	5— . 1,303
ING.	Total.	8	:	4	:	н	н	8	8	:	:	61	8	19	of 188
INAT	Other Places.	н	:	н	:	:	:	H	:	:	:	:	:	<u>س</u>	tion
In ILLUMINATING.	Business,	Н	:	8	:	:	:	8	r	:	:	8	н	I	mera
In I	Dwellings.	:	:	н	:	н	н	:	:	:	:	:	Ø	ا م	enu
	Total.	0	н	8	8	н	:	:	:	:	н	н	N	15	rs per
TING	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:		ict, a
IN HEATING.	Business.	н	н	64	64	:	:	:	:	:	:	н	יא	12	distr
Z	Dwellings.	+	:	:	:	н	:	:	:	:	н	:	:		gs in
	Months,	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration of 1885 Dwellings. Business

Fourth District-Part of City lying between Chambers and Houston Streets, East of Crosby, Elm and Centre Streets.

	Total.	\$58,800	116,865	84,411	17,979	35,8≎0	53,060	28,103	42,980	13,242	7,625	ch2,26	84,597	\$635,647	re 18
Loss.	Contents.	#39,720	91,800	58,014	13,949	211,61	36,275	25,575	29.575	6,267	5,485	79,075	69,302	\$475,252	Number of dwellings to each fire Number of business places to each fire Number of buildings to each fire
	Buildings.	\$19,080	24,465	26,397	4,030	16,685	16,685	4,528	13,405	3,975	2,135	13,715	15,295	\$160,395	dwellings to
RES.	Total.	98	69	64	77	42	69	77	57	19	37	99	70	765	oer of
NUMBER OF FIRES.	Other Places.	8	:	3	0	:	:	:	0	н	4	Ø	:	91	Zumb Zumb
BER (	Business.	22	7	91	14	9	II	17	21	15	∞	91	28	188	
Num	Dwellings.	62	55	45	19	36	28	99	34	45	25	38	42	195	561
75.	Total.	81	21	17	35	14	37	54	38	19	13	6I	56	311	dings
Miscellanfous.	Other Places.	:	:	- 73	н	:	:	:	:	:	н	_	:	ın	s buil
CELLY	Business.	4	3	4	7	0	9	10	14	4	c	2	OI	72	elling sincs: build
Mis	Dwellings.	14	18	II	27	12	31	4	24	15	6	13	91	234	n dw in bu
AND S.	Total.	00	9	,9	9	7	4	7	00	2	8	9	∞	73	Number of frees in dwellings
MANUFACTURING AND OTHER BUSINESS.	Other Places.	н	:	:	:	:	:	:	N	I	ı	:	:	S	umber o
ANUFAC	Business.	4	Ŋ	Ŋ	Ŋ	4	4	2	9	3	H	Ŋ	∞	55	
In M.	Dwellings.	n	н	н	н	ю	:	N	:	н	:	н	:	13	1 district, as per enumeration in 1885— 9,994 2,598
ING.	Total.	34	24	21	21	14	22	ıo	11	28	91	19	22	248	n 188
In Illuminating.	Other Places.	H	:	:	н	:	:	:	:	:	2	н	:	L)	ion i
LLUM	Business.	9	9	н	63	:	н	0	н	∞	33	N	9	38	nera
INI	Dwellings.	27	18	20	18	14	21	14	0.1	20	II.	91	91	205	emun
ij	Total.	20	18	92	15	7	9	:	:	6	9	12	14	133	is per
ATIN	Other Places.	:	:	н	:	:	:	:	:	:	:	:	:	-	ict, a
IN HEATING.	Business.	∞	:	9	:	٠	:	:	:	:	н	4	4	23	distr
-11	Dwellings.	18	18	13	15	7	9	:	:	6	S	00	OI I	109	gs in
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration in 1885— Dwellings Business Total

Fifth District—Part of City lying between Houston and Twenty-third Streets.

	Total.	\$13,022	201,340	35,760	155,940	36,035	103,721	145,074	24,772	8,715	75,316	22,010	39,607	\$864,312	21 23 35
		-t#:	CA CA		н		H	н						₹6	fire
Loss.	Contents.	\$8,327	157,135	32,070	1:0,735	30,890	42,446	115,107	19,537	6,900	140,89	17,955	33,885	\$653,028	each fire ces to each each fire.
	.sgniblind	\$4,695	44,205	3,690	35,205	8,145	61,275	29,967	5.235	1,815	7,275	4,055	5,722	\$211,284	Number of dwellings to each fire  Number of business places to each fire  Number of buildings to each fire
RES.	Total.	99	43	45	45	52	51	57	39	35	43	4	54	575	er of der of ber of b
F F11	Other Places.	+	н	н	:	н	N	ω	н	н	н	01	н	15	Tumb Tumb
SER O	Business.	41 -	II	13	14	15	91	15	19	6	19	19	52	186	ZZ Z
NUMBER OF FIRES.	Dwellings.	Si	31	31	32	36	33	39	19	25	23	23	31	374	374 186 560
	Total.	30	CI	12	II	21	92	43	6 <b>1</b>	15	81	25	50	240	lings.
MISCELLANEOUS.	Other Places.	   H	:	:	:	:	01	64	:	:	:	63	-	00	build
CELLA	Business.	3	ıΩ	3	9	6	9	OI	∞	4	6	II	oi Oi	48	elling siness suild
Mrs	Dwellings.	91	2	6	2	12	81	31	II	·	6	12	6	148	in dw in bus es in
AND S.	.IstoT	н	Ŋ	7	7	3	∞	3	6	7	9	3	e e	62	Number of fires in dwellings Number of fires in business buildings.  Total fires in buildings
MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	н	:	н	:	:	н	н	н	:	:	20	Imber o
INUFAC	Business.	н	01	9	ν	н	7	c,	7	4	4	3	n	94	
In M.	Dwellings.	:	ж	:	Ø	н	H	:	H	01	I	:	:	II	85- 5,936 3,836
NG.	Total.	81	IO	12	13	18	13	II	II	<sub>∞</sub>	122	12	15	153	1 188
In Illuminating.	Other Places.	:	:	:	:	:	:	н	:	:	:	:	:	H	ion ir
TOW	Business.	70	4	н	н	Ŋ	Ø	01	4	:	3	4	'n	36	nerat
In J	Dwellings.	13	9	II	12	13	II	∞	7	∞	6	∞	oI	911	enur
, i	. Total.	27	18	14	15	OI	4	:	:	Ŋ	7	4	9x	120	s per
ATING	Other Places.	:	н	:	:	:	:	:	:	:	:	:	:	"	ict, a
In Heating.	Business.	I/O	:	ж	01	:	н	:	:	н	3	н	4	50	distr
In	Dwellings.	22	17	II	13	Io	3	:	:	4	4	3	12	66	gs in
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration in 1885— 15, Business. 3  Total 199

Sixth District - Part of City lying between Twenty-third and Fifty minth Streets.

MANUFACTURING AND MISCELLANBOUS. NUMBER OF FIRES. LOSS.	Business.  Other Places. Total.  Dwellings.  Dwellings.  Dwellings.  Total.  Other Places.  Total.  Dwellings.	10 · · · 13   18   7 · · · 25   62   27   1   90   \$34,270   \$35,080   \$69,330		3 4 20 9 1 30 52 18 2 72 162,615 259,673 422,288				54,907	3 2 6 15 4 19 31 12 3 46 5,150 15,330 20,480	10 10 10 2 12 22 13 1 36 17,890 39,150 57,040	6 6 11 8 3 22 29 19 3 51 6,559 15.460 22,110	6 7 111 8 1 20 31 18 2 51 7,702 28,991 36,693		.72 3 91 216 75 8 299 505 210 16 732 \$355,344 \$735,171 \$1,092,315	Number of fires in dwellings 506 Number of dwellings to each fire 3.10 Number of business places to each fire 3.10 Number of business places to each fire 3.10 Number of business places to each fire 3.10 Number of second fire 3.10 Number of second fires in dwellings
In M.	Dwellings.	m	:	н	3	3	0	Ø	н	:	:	н	:	91	. 22,274 . 4,585
In ILLUMINATING.	Total.	24	50	21	15	12	17	13	21	13	15	91	81	205	in 18
MINA	Other Places.	н	:	н	:	:	:	:	н	н	:	-	:	5	ation
ILLUI	Business.	2	3	4	n		3	8	2	н	22	ı	7	4 24	ımer
Z	Dwellings.	18	17	91	12	6	14	II	15	11	IO	14	II	158	r ent
ن	Total.	88	ćr	17	17	15	2	:	:	н	∞	00	61	137	as pe
In HEATING.	Other Places,	:	:	:	:	:	:	:	:	:	:	:	:	:	rict,
H H	Business.	2	N	Ø	H	:	н	:	:	:	:	co	4	21	dist
4	Dwell'ngs,	23	14	15	91	15	4	:	:	н	∞	Ŋ	15	115	gs in
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration in 1885— Dwellings. Business.

Seventh District-Part of City lying between Fifty-ninth and One Hundred and Tenth Streets, West of Fifth Avenue.

	Total.	\$782	7,370	285	230	50	470	78	75	460	1,150	120	55	\$11,125	. 52 e 102
Loss.	Contents.	\$427	3,395	8	65	ů,	150	50	:	185	300	115	1C	\$4,822	Number of dwellings to each fire 52 Number of business places to each fire 102 Number of buildings to each fire 61
	Buildings.	\$355	3,975	205	165	:	320	28	75	275	850	Ŋ	52	\$6,303	dwellings to cusiness plac
RES.	Total.	6	7	6	Ŋ	Ŋ	4	4	8	4	9	3	3	19	er of the
F FI	Other Places,	:	:	cc	:	:	:	:	:	:	:	:	:	6	Zumb Zumb Zumb
BER O	Business.	0	01	8	:	-	н	н	:	1	:	:	:	l oi	
NUMBER OF FIRES	Dwellings.	7	2	4	S	4	33	3	01	3	9	3	ς,	48	34 82
-	Tetal.	יא	'n	н	н	:	3	3	N	н	×	н	:		dings
MISCELLANEOUS.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	s luil
ELL	Business.	н	:	:	:	:	н	:	:	:	:	:	:	0	elling sines: build
Misc	Dwellings.	4	3	4	н	:	8	3	8	н	н	н	:	61	in dw in bu
AND S.	Total.		I	4	:	:	ı	H	:	н	н	:	I	Io	of fires in dwellingsof fires in business luildings.  Total fires in buildings
MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	т.	:	:	:	:	:	:	:	:	:	8	Number of fires in dwellingsNumber of fires in business l'uiddings.  Total fires in buildings
ANUFAC	Business.	:	н	н	=:	:	:	I	:	н	:	:	:	4	
IN M	Dwellings.	:	:	:	:	:	н	:	:	:	н	:	н	6	5- 2,493 1,021 3,514
ING.	Total.	:	н	н	3	3	:	:	,:	:	'n	:	н	12	188
In Illuminating.	Other Places,	:	:	:	:	:	:	:	:	:	:	:	:	:	ii uoi
LLUM	Business.	:	:	:	:	н	:	:	:	:		:	:	н	nerat
In I	Dwellings.	1:	н	H	3	01	:	:	:	:	3	:	H	II	enur
75	Total.	4	N	3	н	0	:	:	:	0	I	01	н	81	s per
In Heating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	district, as
HE	Business.	1	н	н	:	:	:	:	:	:	:	:	:	3	distr
Z	Dwellings.	3	н	61	н	01	:	:	:	01	н	01	-	15	gs in
	Монтня.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration in 1885— Dwellings. Business. Total.

Eighth District - Part of City lying between Fifty-ninth and One Hundred and Tenth Streets, East of Fifth Avenue.

	.lstoT	\$8,045	5,507	25,347	14,717	11,765	1,650	3,087	3,192	4,285	2,480	2,552	7,100	\$91,727	fire. 23
Loss.	Contents,	\$6,305	4,200	13,555	6,582	8,715	1,432	2,065	2,187	2,960	2,010	2,116	4,610	\$56,737	Number of dwellings to each fire Number of business places to each fire. Number of buildings to each fire
	Buildings.	\$r,740	1,307	11,792	8,135	3,050	218	3,022	1,005	1,325	470	436	2,490	\$34,990	dwellings t business pla buildings to
RES.	Total.	35	24	22	15	56	29	36	20	91	14	15	34	286	ber of ber of ber of
NUMBER OF FIRES	Other Places.	:	:	:	:	:	7	:	01	:	:	:	0	9	Num
BER (	Business.	m	_1/2	3	S	6	4	2	7	ν	9	n	∞	63	
NCM	Dwell'ngs.	32	61	19	10	17	23	31	II	11	∞	12	24	217	. 280
r.s.	Total.	91	∞	12	c	91	12	27	6	∞	9	∞	91	141	lings.
MISCELLANEOUS.	Other Places.	:	:	:	:	:	H	:	:	:	:	:	н	0	Ss build
CELL	Business.	:	н	01	н	4	8	c	3	01	3	61	9	29	elling iness in bu
Mıs	Dwellings	91	7	01	8	12	6	77	9	9	3	9	6	IIO	n dw n bus fires
S AND	.IstoT	81	н	8	4	3	ĸ	8	9	н	3	н	N	32	Number of fires in dwellings  Number of fires in business buildings  Total fires in buildings
MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	:	:	:	н	:	8	:	:	:	:	3	umber o
ANUFA	Business.	8	н	H	3	3	8	8	n	н	81	Ħ	ı	22	
In M	Dwellings.	:	:	H	H	:	8	:	H	:	H	:	I	7	5- 9,689 1,454 11,143
TING.	Total.	4	Ŋ	н	ιn	S	OI	7	N	Ŋ	н	n	∞	59	1885-
IN ILLUMINATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	н	H	on in
LLUN	Business.	:	8	:	н	8	:	:	н	8	н	:	н	l oi	erati
Z	Dwellings.	4	ĸ	н	4	3	CI	^	4	8	:	3	9	48	enum
i,	Total.	13	Io	1~	3	8	01	:	:	Ø	4	3	∞	54	s ber
HEATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ict, a
In H	Business	-	H	:	:	:	:	:	:	:	:	:	:	0	distr
-	Dwellings.	12	6	7	n	81	8	:	:	8	4	3	∞	52	in sg in
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district, as per enumeration in 1885— Dwellings Business. Total.,

Ninth District—Part of City tying between One Hundred and Tenth Street and Harlem River, West of Eighth Avenue.

	I	In Heating.	ATING	75	InI	LUM	IN ILLUMINATING.		In Mar Orr	IER BU	MANUFACTURING AND OTHER BUSINESS.	AND.	Mis	CELL.	MISCELLANEOUS.		Now	BER C	NUMBER OF FIRES	RES.		Loss.	
Монтня.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total,	Buildings.	Contents.	Total.
anuary	3	:	:	_ w	н	:	:	   H	:	ı	:	н	н	:	:	н	2	н	:	9	\$115	\$232	\$344
February	2	:	:	64	н	:	:	н	:	:	:	:	01	04	:	4-	ın	8	:	7	2,505	3,500	6,005
March	:	:	:	:	:	:	:	:	:	:	н	н	:	H	:	н	:	н	I	7	25	:	25
April	н	:	:	Н	64	:	:	(1	:	8	н	3	н	:	:	н	4	Ø	н	7	2,595	3,175	5,770
May	:	:	:	:	I	:	:	н	:	:	:	:	н	:	H	N	01	:	н	23	365	∞	373
June	:	:	:	:	(1	:	:	0	н	н	:	01	:	:	:	:	3	н	:	4	390	50	440
July	:	:	:	:	:	:	:	:	:	:	0	01	:	:	:	:	:	:	64	7		:	
August	:	:	:	:	:	:	:	:	:	н	н	8	н	:	:	-н	н	н	H	c	175,720	000,001	275,720
September	н	:	:	н	:	:	:	:	н	:	:	н	н	:	:	н	3	:	.:	n	co6	25	905
October	:	:	:	:	н	н	:	0	:	8	:	Ø	:	:	:	:	н	3	:	4	1,115	3,740	3,855
November	н	:	:	н	:	н	:	н	:	:	61	01	н	:	н	01	8	н	co	9	25	:	
December	:	н	:	н	н	:	:	H	:	:	8	n	:	н	:	н	н	01	3	9	091	100	260
Total	00	н	:	6	6	N	1:	H	N	7	OI OI	19	00	4	N	14	27	14	12	53	\$183,912	\$109,810	\$293,722
Number of buildings in district, as per cnumeration in 1885—Dwellings The Business.	ngs in	distr	ict, 8	is per	cun	neral	ion ii	1 1885	1,862	NZ N n n	mber o	Number of fires in dwellings	in dw in bu	rellin	gss	dings	. 27	-	Numb	er of	dwellings t	Number of dwellings to each fire	69 fire 111
																	-						

Number of buildings to each fire..... 47

Total fires in buildings .... 167

Total ..... 7,886

Tenth District—Part of City lying between One Hundred and Tenth Street and Hariem River, East of Eighth Avenue.

	1								1			1		1		1-				-			
		In HEATING.	EATIN	G	Iz	In Illuminating.	IINAT	ING.	IN MA OTO	MANUFACTURING AND OTHER BUSINESS.	FURING	AND	MISCELLANEOUS.	BLLA	NEOU		NUMBER OF FIRES.	ER OI	F FIR	ES.		Loss.	
Months.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	Buildings.	Contents.	Total.
January	w	:	:	3	1	<u>س</u>	:	2	:	03	:	8	9	01	:	20	13	7	<del> </del>	50	\$1,48o	\$i,535	\$3,015
February	8	:	:	8	н	8	:	3	H	3	н	ນ	'n	Ci	:	ν	7	7	н	15	5,335	2,120	7,455
March	3	:	:	33	:	:	:	:	:	I	:	н	m	4	н	∞	9	'n	н	N	278	2,055	2,333
April	н	н	:	8	8	8	:	4	:	3	:	3	vı	0	:	7	00	∞	:	91	1,385	2,835	4,220
May	8	:	:	8	4	н	:	νs	:	:	:	:	O	н	:	m	∞	0	:	OI	35	336	371
June	co	:	:	n	8	I	:	3	:	8	:	8	9	0	:	00	11	'n	:	91	1,522	4,240	5,762
July	:	:	:	:	3	:	:	3	:	٦	:	61	II	CS .	~~~	15	14	4	0	50	619	995	1,614
August	:	:	:	:	e .	:	:	· c	:	н	СI		'n	4	:		∞	v	8	15	410	1,105	1,515
September	:	:	:	:	н	:	:	н	:	:	:	:	01	4		9	3	4	:	7	210	301	511
October	8	:	:	N	3	61	:	Ŋ	:	н	:	н	Н.	:	:	н	9	т 	:	6	I S	95	011
November	3	н	н	Ŋ	8	64	:	4	:	8	:	N	64	61	:	4	7	7	н	15	6,457	7,292	13,749
December	4	N	н	7	~	н	:	4	:	М	:	8	ν	8	:	7	12	7	н	50	81,626	33,148	11; 774
Total	23	4	0	29	31	14	:	45	н	19	3	23	1 84	27	- m	- 8 <i>t</i>	103	64	00	175	\$ 19,372	\$56,057	\$155,429
Number of buildings in district, as per enumeration in 1885— Dwellings.	ngs ii	n dist	rict,	as pe	r enu	тега	tion i	n 188	5 6,941		mber o	Number of fires in dwellings	n dwe	Iling	Sd	ings.	103		dmu)	er of d	Number of dwellings to each fire Number of business places to each fire	each fire.	fire 15
																					:	,	1

Eleventh District—Part of City lying between Harlem and East Rivers, Kingsbridge Road, etc., and Bronx River.

IN HEA																	_			
	LING.	· · · · ·	N ILL	UMIN	IN ILLUMINATING.	Z	MANUFACTURING AND OTHER BU INESS.	TURING TU INES	AND	Mis	MISCELLANEOUS.	ANEO		NUMBER OF FIRES	ER OI	FIR	ES.		Loss.	
Dwellings, Business,	Other Places,	Total.	Dwellings.	Business,	Other Places.	Dwellings.	Business,	Other Places.	Total.	Dwellings.	Busines.	Other Places.	Total.	Dwellings.	Business,	Other Places.	Total.	Buildings.	Contents.	Total.
anuary 5 I	:	9		н	н	3 :	4	:	4	8	8	:	٦٧	6	00	   H	18	\$10,945	\$25,485	\$36,430
February 1 1 .	 :		:	- <u>·</u> :	•	:	:	:	:	н	6	:	3	7	3	:	70	069	650	1,340
March 3		٠ •	:	· :	· :	:	8	:	m	:	:	:	:	4	01	:	9	4,475	1,200	5,675
April I	 :	н	-	:	:	:	:	:	:	:	3	01	70	0	8	01	7	3,600	710	4,310
May	<u>-</u>	н	(1)	н	:	:	н	:	I	:	н	:	н	т г	т г	:	9	9,050	13,975	23,025
June	<u>:</u>	:	4		:	S I	:	н	8	8	:	н	3	7	н	Ø	oı	1,160	802	1,962
July	:	:	63	:	:	:	:	:	:	7	н	01	OI	6	н	N	12	2,102	603	2,705
August	:	:		:	:	:	81	61	4	н	н	04	+	4	m	4		2,315	2,646	4,961
September	:	:	:	н.	:	:	:	:	:	8	3	:	ıΩ	61	4	:	9	515	235	750
October I I .	:	8	61	н	:	:	:	:	:	н	61	:	3	4	4	:	∞	2,355	460	2,815
November	:	н	н	· :	:	H	:	:	н	61	н	n	9	25	н	n	6	1,305	089	1,985
December 2	н		:		:	:	:	0	81	н	8	8	ın	8	4	יע	12	5,615	2,705	8,320
Total 15 3	Н Н	_ l	91	1	1 24	8	6	ທ	17	00	81	12	50	54	37	61	OII	\$44,127	\$50,151	\$94,278
Number of buildings in district, as per enumera ion in 1885— Dwellings	ct, as	per 6	enum	era io	ni no	6,989 3,184	Nun	Number of fires in dwellings Number of fires in business buildings	fires in	dwe	llings	uildin	: bs	37	ZŽ	ımbe	r of d	wellings to	Number of dwellings to each fire Number of business places to each fire	129 re 89
Total	:		:			10.173		-	Total fires in buildings	es in	build	ings.		I	Ž	mber	r of pr	nildings to	Number of buildings to each fire	112

Twelfth District—Part of City lying North of Spuyten Duyvil Creek and Kingsbridge Road, etc.

Dwellings.   Dwe	Dwellings   Dwel		) many	HE	In HEATING.	ċ	IN	TOM	IN ILLUMINATING.	NG.	In Mai	IN MANUFACTURING AND OTHER BUSINESS.	URING	AND .	Misc	Miscellaneous.	NEOU		NUMBER OF FIRES.	ER OI	FIR	ES.		Loss.	
1   1   1   1   1   1   1   1   1   1	1   1   2   3   2,000   4,300   5,125   1,000   1,00	Months.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places,	Total.	Dwellings.	Business.	Other Places.	1	Dwellings.			Total	Dwellings.	Business.	Other Places.	Total.	Buildings.	Contents.	Total.
1	1	unuary	H	:	:	-	:	:	:	:	:	:	:	:	:	:	1	:	-	:	:	-	\$300	\$125	\$425
1	1   1   1   1   2   4   5   550   1   1   1   1   1   2   4   5   550   1   1   1   1   1   1   2   4   5   550   1   1   1   1   1   1   1   1   1	ebruary	:	:	:	:	:	N	:	73	:	:	:	:	H	:	:	н	-	(1)	:	n	2,000	4,300	6,300
1	Transport   Tran	larch	H	:	:	н	:	:	:	:	:	:	:	:	:	н	:	н	н	н	:	8	840	750	1,590
1   1   1   1   1   1   1   1   1   1	The state of the	pril	:	:	:	:	:	:	:	:	:	:	:	:	I	-	01	4	-	H	0	4	S	:	
1   1   1   1   1   1   1   1   1   1		lay	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:			:
1   1   1   1   1   1   1   1   1   1		me	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:		:	:	:	:	:	:	
1   1   1   1   1   1   1   1   1   1		ıly	:	:	:	:	:	н	:	н	:	:	:	:	:	н	-:	н	 :	01	:	01	650	:	650
1		ugust	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:		 :	:	:	:	:	:	
1		ptember	:	:	:	:	:	:	:	:	:	:	:	:	:	:		:	:	:	:	:	:	:	
1	2 1	ctober	:	:	:	:	:	:	:	:	:	:	:	:	н	:	:	н	н	:	:	H	25	IOO	125
1	2 2 2 1 3 4 1 1 1 2 3 2 8 7 6 2 15 \$3.820 \$5.375 1 I I I	ovember	:	:	:	:	:	:	:	:	н	:	:	н	:	:		:	н	:	:	н	:	:	
2 1 2 3 2 8 7 6 2 15 \$5,820 \$55,375	1   2   3   2   8   7   6   2   15   \$5,375     Number of fires in dwellings   7   Number of dwellings to each fire   Number of fires in business buildings   6   Number of business places to each fire	ecember	:	:	:	:	н	:	:	н	:	:	:	:	:	:		:	н	:	:	н	:	001	100
	Number of fires in dwellings 7 Number of dwellings to each fire Number of fires in business buildings 6 Number of business places to each fire		0	:	:	0	н	6	:	+	H	:	:	H	(4)	m	0	∞		9	01	15	\$3,820	\$5,375	\$9,195

Number of dwellings to each fire Number of business places to each fi		Fotal fires in buildings 13 Number of buildings to each fire
Number of fires in dwellings 7 Number of fires in business buildings 6		Total fires in buildings
of buildings in district, as per enumeration in 1885— ellings	ness	TotalTotal

. 124

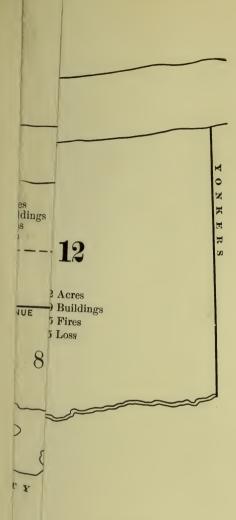
Thirteenth District-Governor's, Bedlod, Ellis', Blackwell's, Ward's, Randall's and North Brother Islands.

		Total.	:	:	:	:	:	:	:	:	:	:	:	:	:	219 c	450
stands.	Loss.	Contents.	:	:	:	:	:	:	:	:	:	:	:	:		Number of dwellings to each fire Number of business places to each fire	Number of buildings to each fire
tvorum Droiner Islands.		Buildings.		:	:	:	:	:	:	:	:	:	:	:	:	dwellings to	buildings to
7 111	ES.	Total,	:	:	:	:	:	:	:	:	:	:	:	н	н	r of	r of
1047	F FIR	Other Places.	:	:	:	:	:	:	-:	:	:	:	:	:	1:	umbe	nmbe
ann	ER O	Business,	:	:	:	:	:	:	:	:	:	:	:	:	:	ZZ	
6 111	NUMBER OF FIRES	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	н	н	H :	н
in Lead	us.	Total.	:	:	:	:	:	:	:	:	:	:	:	.:	1:	sgu	
3, 41	Miscellaneous.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:		mildin	lings,
	CELL	Business.	:	:	:	:	:	:	:	:	:	:	:	:	1:	llings less b	buile
	Mis	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	dwe	res in
6 11300	S.	Total.	;	:	:	:	:	:	:	:	:	:	:	:	:	Number of fires in dwellings Number of fires in business buildings	Total fires in buildings,
reacted, Lines, Luchacei 3, 11 at a 3, manufe 3 and	MANUFACTURING AND OTHER BUSINESS.	Other Places,	:	:	:	:	:	:	:	:	:	:	:	:		mber of	
,	ANUFAC THER F	Business.	:	:	:	:	:	:	:	:	:	:	:	:	:	NZ NZ	
, , ,	In M	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	85— 219 231	45c
	ING.	Total.	:	:	:	:	:	:	:	:	:	:	:	:	1:	in 18	<b>.</b>
5	In Illuminating.	Other Places.	:	:	:	:	٠:	:	:	:	:	:	:	:	:	ation	
iau iaaaa	LLUM	-ssaniau8	:	:	:	:	:	:	:	:	:	:	:	:	:	umer	
	InI	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	er en	
	9	Total.	:	:	:	:	:	:	_:	:	:	:	:	н	<b>H</b>	as p	
	ATIN	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	trict,	
	In Heating.	Business.	:	:	:	:	:	:	_:	:	:	:	:	:	:	in dis	
	H	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	н	н	ings	Total
		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of 1 uiidings in district, as per enumeration in 1885— Dwellings	Tota

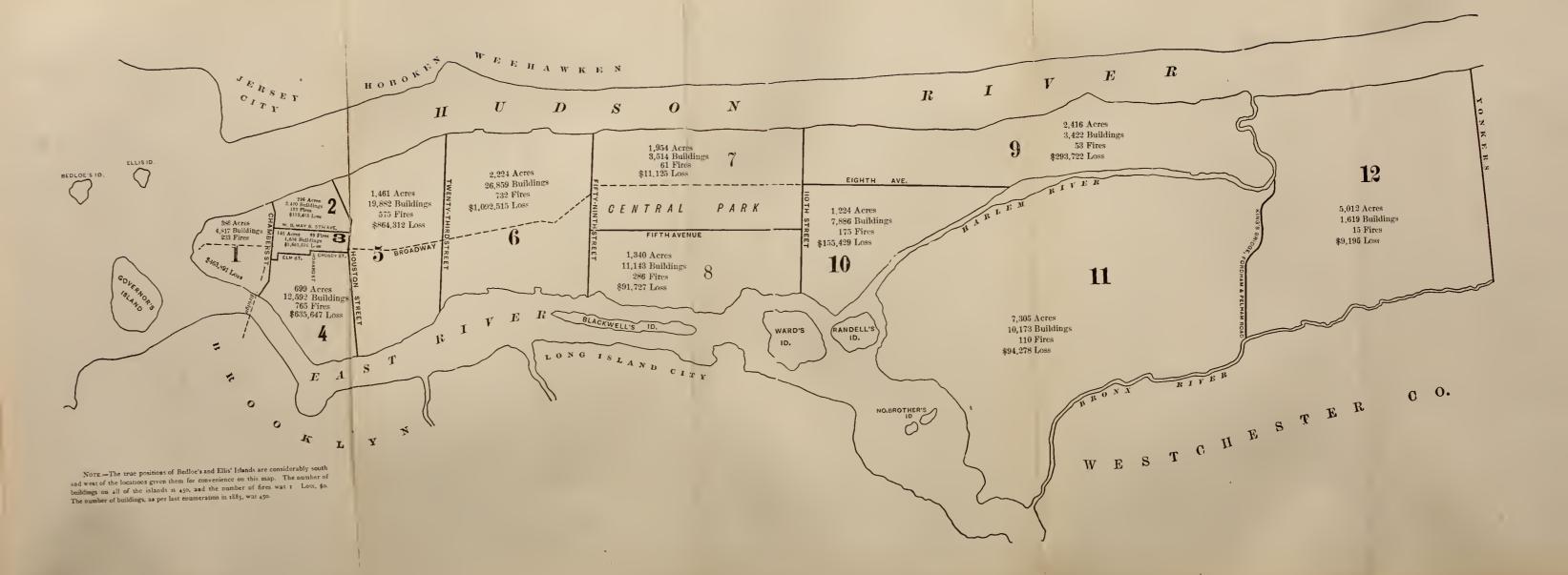
		T'otal.	105	46	47	311	240	<b>5</b> 39	21	141	14	34	20	œ	:	1,360
	ANEOUS.	Other Places.	4	8	:	70	∞	∞	:	8	8	33	12	61	:	84
	MISCELLANEOUS.	Business.	98	9I	43	72	84	75	8	50	4	27	81	3	:	459
		Dwellings.	15	28	4	234	148	216	61	OII	∞	48	50	3	:	853
	AND	Total.	56	14	∞	73	62	16	01	32	61	23	17	н	:	406
	In Manufacturing and Other Business.	Other Places.	63	'n	:	ĸ	'n	3	m	3	OI	33	7.0	:	:	44
	Manufacturing Other Business.	Business.	53	∞	∞	55	46	72	4	22	7	6 <b>1</b>	6	:	:	303
1	I.	Dwellings.	н	-	:	13	11	9 I	m	7	61	н	c	н	:	59
ulation.		T'otal.	41	28	19	2.48	153	205	12	59	11	45	24	4	:	849
Recapitulation.	INAT'ING.	Other Places.	2	-	m	Ŋ	н	N	:	H	:	:	н	:	:	61
	In Illuminating.	Business	28	01	11	38	36	42	н	IO	6	14	7	'n	:	212
		Dwellings.	II	17	Ŋ	202	911	158	11	48	6	31	91	н	:	628
		Total.	31	34	15	133	120	137	81	54	6	59	19	64	н	602
	ATING.	Other Places.	:	61	:	н	I	:	:	:	:	64	н	:	:	7
	In HEATING.	Business.	81	00	12	23	50	21 4	m	61	н	4	63	:	:	rr5
		Dwellings,	13	24	n	109	66	911	15	52	∞	23	15	N	н	480
		DISTRICTS.	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirtcenth	Tota!

# Recapitulation.

Districts.   Number of Fires.   Number of Bullings.   Bullings of Bullings.   Bullings of Bullings   Bullings of Bullings   Bullin								7						
Dwellings.   Dwe		ž	IMBER OF	FIRES		Numbel	R OF BUILD	INGS.	AVERAC	GE NUMB	ER OF H FIRE.		Loss.	
40         185         8         233         1 1012         3,805         4,817         25         21         21           11         12         14         3         89         333         1,393         1,636         28         18         19           11         12         74         3         89         333         1,393         1,636         28         18         19           11         12         15         375         15,986         3,836         19,822         43         11         19           11         186         15         375         15,986         3,836         19,822         43         21         35           11         10         732         22,274         4,585         26,839         44         21         38           11         10         3         61         2,493         1,454         11,143         45         21         33           11         12         23         1,862         1,562         1,454         45         23         39           11         10         6,941         945         7,886         67         11         83           11	DISTRICTS.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business, etc.	.lstoT	Dwellings.	Business, etc.	.leioT	Buildings.	Contents.	Total.
70         42         10         122         5,518         902         3,420         36         21         31         31           11         74         3         89         333         1,393         1,636         28         18         18         19           11         561         186         16         765         9934         2,598         12,592         18         19         19           11         186         16         765         9934         2,598         19,822         43         19         19           11         26         21         15,986         3,836         19,822         43         17         17           11         48         10         3         61         2,493         1,621         3,514         52         102         51         38           11         48         10         3         61         2,493         1,454         41         21         38         41         41         38         39           11         27         14         12         53         1,862         1,560         3,422         69         11         88         112         45	irst	40	185	00	233	1 012	3,805	4,817	25	21	21	\$110,263	\$353,628	\$463,891
12         74         3         89         333         1,393         1,596         1,596         1,598         1,598         1,598         1,598         1,694         1,614         4,6         21         38           100         27         14         12         53         1,862         1,560         3,422         69         111         83           100         3         64         8         1,75         6,941         945         7,886         67         11         83           100         3         10         110         6,943         9,45         7,886         67         11         83           10         10         10         10         10         6,941         945         7,886         67         11         450           10         1         1         1	Second	7.5	42	OI	122	2,518	505	3,420	36	21	31	25,835	86,630	112,465
561         186         16         765         9934         2,598         12,592         18         14         17            334         186         15         575         15,986         3,836         19,822         43         21         35            506         210         16         732         22,274         4,585         26,889         44         21         38            48         10         286         9,689         1,454         11,143         45         23         39            27         14         12         53         1,862         1,560         3,422         69         111         83            27         14         12         53         1,862         1,560         3,422         69         111         83            103         64         8         175         6,941         945         7,886         67         11         83            1         10         110         6,989         3,184         10,173         129         89         112            1         1 <t< td=""><td>Chird</td><td>12</td><td>74</td><td>3</td><td></td><td>333</td><td>1,303</td><td>1,636</td><td>28</td><td>81</td><td>61</td><td>330,985</td><td>1,330,631</td><td>919,199,1</td></t<>	Chird	12	74	3		333	1,303	1,636	28	81	61	330,985	1,330,631	919,199,1
374         186         15         575         15,986         3,836         19,822         43         21         35           366         210         16         732         22,274         4,585         26,899         44         21         38           367         210         3         61         2,493         1,021         3,514         52         102         61           377         31         12         286         9,689         1,454         11,143         45         23         39           37         14         12         53         1,862         1,560         3,422         69         111         83           38         64         8         175         6,941         945         7,886         67         15         47           39         11         6,989         3,184         10,173         129         89         112           450         2         15         945         674         1,619         135         112         124           450         1         1         2         1         21         21         450         21         450         21         450         21<	Tourth	195	185	16	765	9 9 9 9 4	2,598	12,592	18	14	17	100,395	475,252	635,647
366         210         16         732         22,274         4,585         26,859         44         21         38           10         3         61         2,493         1,021         3,514         52         102         61           10         3         6         2,86         9,689         1,454         11,143         45         23         61           10         27         14         12         53         1,862         1,560         3,422         69         111         83           10         10         17         6,989         3,184         10,173         129         89         112           10         1         1         6,989         3,184         10,173         129         89         112           1         6         2         15         945         674         1,619         135         112           1         1         1         219         231         450         219         124           1         1         1         21         26,098         107,353         40         24         34	Tifth	374	186	15	575	15,986	3,836	19,822	43	21	35	211,284	653,028	864;312
48         10         3         61         2,483         1,021         3,514         52         102         61           10         21         63         6         286         9,689         1,454         11,143         45         23         39           10         12         53         1,862         1,556         3,422         69         111         83           10         64         8         175         6,941         945         7,886         67         15         47           10         10         10         6,989         3,184         10,173         129         89         112           11         1         1         219         245         674         1,619         135         112         124           11         1         1         219         231         450         11         450         11         450         11         450         11         450         11         450         11         450         11         450         11         450         11         450         11         450         11         450         11         450         11         450         11	Sixth	206	210	91	732	22,274	4,585	26,859	44	21	38	356,344	736,171	1,092,515
27	Seventh	48	IO	т.	19	2,493	1,021	3,514	52	102	19	6,303	4,822	11,125
27         14         12         53         1,862         1,560         3,422         69         111         83           103         64         8         175         6,941         945         7,886         67         15         47           54         37         19         110         6,989         3,184         10,173         129         89         112           7         6         2         15         945         674         1,619         135         112         124           1          1         219         231         450          450           2,020         1,079         118         3,217         81,255         26,098         107,353         40         24         34	Sighth	217	63	9	286	689,6	1,454	11,143	45	23	39	34,990	56,737	91,727
103         64         8         175         6,941         945         7,886         67         15         47           54         37         19         110         6,989         3,184         10,173         129         89         112           7         6         2         15         945         674         1,619         135         112         124           1          1         219         231         450         219          450           2,020         1,079         118         3,217         81,255         26,098         107,353         40         24         34	:	27	14	12	53	1,862	1,560	3,423	69	III	83	183,912	018,601	293.722
54         37         19         110         6,989         3,184         10,173         129         89         112           1         6         2         15         945         674         1,619         135         112         124           1           1         219         231         450         219         450           2,020         1,079         118         3,217         81,255         26,098         107,353         40         24         34	Fenth	103	64	∞	175	6,941	945	583,7	19	15	47	99,372	. 56,057	155,429
7         6         2         15         945         674         1,619         135         112         124           1           1         219         231         450         219          450           2,020         1,079         118         3,217         81,255         26,098         107,353         40         24         34	Eleventh	54	37	61	OII	686'9	3,184	10,173	129	68	112	44,127	50,151	94,278
2,020 1,079 118 3,217 81,255 26,098 107,353 40 24 34	[welfth	7	9	8	15	945	674	619,1	135	112	124	3,820	5,375	601'6
2,020 1,079 118 3,217 81,255 26,098 107,353 40 24 34	[hirteenth	н	:	:	н	219	231	450	219	:	450	:		
		2,020	1,079	811	3,217	81,255	26,098	107,353	40	24	34	\$1,576,630	\$3.918,292	\$5,485,922



c o.



# Indictments and Convictions for Arson, Incendiarism, etc.

			DESCRIPTION OF PERSONS.	RSONS.		NATURE CF CHARGE AND	NATURE OF	WHEN AND OF	SENTENCE
Name,	Age	Sex.	Color.	Nativity.	Occupation.	CIRCUMSTANCES.		What Convicted.	AND REMARKS.
May Wilson	11	Female White	White	United States None	None.	Setting fire to Hospital for Ruptured and Crippled Children, Lexington avenue, Forty-second street,			February 4, sent to care of "So- ciety for Pre- vention of Cru- elty to Chil- dren."
John M. D. Fanshawe 28	28	Male	3	*	Clerk	February 2	February 21, ar- son, first de-		March.2, bailed in \$7,500.
Thomas Eagan	04	:	*	Ireland	Laborer	ary 3	March 23, ar- son, second degree		Indictment dis- missed by the Court.
Gerson Zyguas	7. 7.	:	3	Poland Shoemaker	Shoemaker	Setting fire to premises No. 210 Delancey street, April 6	April 26, arson, first degree		Acquitted, May 25. Three years State
William Wichman	34	:	3	Germany	Driver	Setting fire to premises No. 66 Norfolk street, May 16	May 25, arson. {	Attempt at ar- son, third de- gree	Prison. Plea of attempted arson, third degree, accepted by the Court
John Miller	39	:	:	*	Carpenter	Setting fire to premises) No. 1657 Th rd ave- nue, June 2	June 18, arson, seconddegree)		Indictment dismissed by the Court.
Mary Ismay Schafer , 48		Female	3	Ireland	Housekeeper.	Setting fire to premises No.125 East Eleventh	Sept. 5, arson.   second degree }	Oct. 30, arson, second degree }	Seven years, Penitentiary.  Dismissed by the
Henry Schafer 45	45	Male	*	Germany	Laborer	street, August 4	Sept. 5, arson, second degree		Court for want of sufficient evidence to implicate.

## BUREAU OF COMBUSTIBLES.

# Operations under the Laws Regulating the Storage of Combustibles and Explosive Materials, etc.

			of.			Disp	OSITIO	on.		
COMPLAINTS OF VIOLATIONS, ETC.	Pending last Report.	Received since.	Total to be Disposed of.	Complied on Notice.	Unfounded.	Penalties Collected.	Penalties Remitted.	Prosecution Recommended.	Total.	Now pending.
Selling kerosene oil below test		2	2			I		I	2	٠
Selling kerosene oil without license .		130	130		2			128	130	
Chimney fires	16	207	223			61	142		203	20-
Hoistways found open after con-	4	11	15			2	7	6	15	
Fire hydrants obstructed	I	14	15	11	4				15	
Lights unprotected	9		9	I					1	8
Want of fire-extinguishing appliances	5		5						)	5
Combustible material in excessive quantity	4	35	39	15	16				31	8.
Kerosene or naphtha, etc., in ex- cessive quantity	3	15	18	10	5	••		I	16	2
kept without permit	••	21	21	2	6			13	20	
transported, etc	71	29	100	15	11				27	73.
Ashes in wooden boxes, etc		5	5	2	1				3	2.
Hay, straw, cotton, rags, and other vegetable fibre stored in excessive quantity	••	I	I	I					1	
Total	113	474	587	59	47	64	149	149	468	119

Special surveys made to determine the fitness of	
premises for the storage of combustibles or ex-	
plosive materials	888
Samples of kerosene oil collected and tested	6,788
Special surveys under the new regulations for stor-	
age of wholesale fireworks	13

# Money Received for Licenses and Permits Issued, Penalties Collected, Sale of Explosives, etc., Seized, etc.

For 3,951 kerosene oil licenses issued, at \$10	\$39,510 00
For 78 powder licenses issued, at \$2	156 00
For 604 special permits issued, at \$2	1,208 00
For 14 wholesale fire works permits issued, at	
\$20	280 00
For 120 retail fireworks permits issued, at \$5	600 00
For 87 kindling fire in street permits issued, at	
50 cents	43 50
Total for licenses and permits	\$41,797 50
For 1 penalty for selling kerosene oil be-	
low test, at \$50 \$50 00	
For 61 penalties for chimney fires, at \$5. 305.00	
For two hoistways left open, at \$50 100 00	
Total for penalties	455 00
-	

The following regulations governing the storage and sale of fireworks and other explosive compounds in the City of New York were established by the Board of Fire Commissioners, pursuant to section 456, chapter 410, Laws of 1882:

### FIRST -- SALES AT RETAIL.

Permits for the sale of fireworks, consisting of Chinese crackers, rockets, blue lights, candles, colored pots, lancewheels and other works of brilliant colored fires, between the 10th day of June and the 10th day of July, in each year, will be issued under the following regulations:

1st. Applications for permits must be made, in writing, to the Inspector of Combustibles prior to the 20th day of May, in each year. Such applications must give the name of the person or persons by whom the permit is desired; the location of the premises at which the goods are to be kept and sold; the nature of the business in which such person or persons are engaged at said premises, and the quantity and description of fireworks intended to be kept and offered for sale.

2d. No permit will be issued for such sales to be made at any building or premises where either of the following kinds of business is conducted or carried on: Where cigars or tobacco are kept for sale, where paints, oils or varnish are manufactured or kept, either for use or for sale, where dry goods of any kind, toys (unless the toys are entirely removed from the premises during the period for which the permit is granted), or other light material of a combustible nature are kept for sale; any carpenter shop, any drug store, any building , a license for the sale at which of kerosene or other product of petroleum has been issued or any building in which gunpowder, blasting powder, gun-cotton, nitro-glycerine, dualin, petroleum or any of its products, coal oil, camphene, burning fluid or other products or compounds containing any of said substances, matches or cartridges (unless such cartridges are kept in a fireproof safe or vault), tar, pitch, resin or turpentine, hay, cotton or hemp are manufactured, stored or kept on sale. Nor will any permit be issued for such sales in any frame or wooden building.

3d. No such permit will be issued for any building in which any person other than the applicant or his family resides.

4th. No permit will be issued for such sales to be made within that portion of the city bounded as follows, viz.: By Chambers street to West Broadway, by West Broadway, South Fifth avenue and Fifth avenue to Fourteenth street, by Fourteenth street to Sixth avenue, by Sixth avenue to Twenty-third street, by Twenty-third street to Fourth avenue, by Fourth avenue, Astor place and Lafayette place, to Great Jones street; thence by a line running through the block to the corner of Bleecker and Crosby streets; thence by Crosby street to How-

ard street, by Howard street to Elm street, by Elm street to Reade street, and thence by a line running through the block to Chambers street.

5th. Not more than one permit will be granted for such sales to be made at premises located on any one square block. Where two or more applications are presented for one block, preference will be given to the one which, in the opinion of the Department, is least objectionable.

6th. All premises for which such permits are issued must be lighted with gas or electricity, and all lights must be protected with glass or wire coverings or globes.

7th. The person or persons to whom such permit is issued must sign an agreement not to permit smoking, or the making or keeping of any fire, nor the use of any substance for illuminating purposes except gas and electricity, upon or about the premises where such sales are licensed, nor to expose any of said fireworks for sale outside the walls of said building, nor in any door or window, and that any violation of such agreement shall operate as a forfeiture of said license.

8th. The entire amount of said fireworks that may be kept on hand in any building, pursuant to any permit issued, shall not be in excess of the aggregate market value of five hundred dollars.

9th. Any violation of any of these regulations shall involve a forfeiture of the license issued thereunder, and subject the party guilty of such violation to the penalty provided by law for selling such articles without license.

10th. The fee for retail licenses hereby provided shall be the sum of five dollars for each license.

# SECOND—STORAGE AND SALE AT WHOLESALE.

Permits for the storage and sale at wholesale of fireworks, consisting of Chinese crackers, rockets, blue lights, candles, colored pots, lance-wheels, and other works of brilliant colored

fires, detonating works, and powder train, within the City of New York, will be issued as follows:

Ist. Application must be made in writing to the Inspector of Combustibles, in the form required for retail permits.

2d. No permit will be issued for such storage or sales at wholesale for that portion of the city lying south of or below Fifty-ninth street, East and West, but permits for the storage and sale in original, unbroken packages, may be issued to dealers in the section of the city bounded by Broadway, Murray, Church and Cortlandt streets, and at the following additional locations: No. 74 Broad street, No. 124 Pearl street, No. 190 Front street, No. 205 Front street, and Nos. 536 and 540 Water street.

3d. Above Fifty-ninth street such storage and sales will be permitted either in fire-proof buildings constructed in the manner required by section 492 of the Consolidation Act as amended by section 20, chapter 566, Laws of 1887, or in brick or stone buildings not more than 25 feet in width, 75 feet in depth and 50 feet in height, and separated from any other building on the sides and rear by a clear open space of not less than 25 feet.

4th. No permit will be issued for the storage or sale at wholesale of any of said articles in any building in which the sale of fireworks at retail would not be authorized, under the rules governing the granting of permits for retail sales. Nor will the storage or sale at wholesale of any of said articles be permitted in any building any part of which is used for dwelling or sleeping purposes.

5th. Smoking must not be permitted in any building for which such permit has been issued. A competent person in uniform (the uniform to be agreed upon by the Chief of Department, Inspector of Combustibles and representatives of the fireworks dealers) must be kept in front of every such building during the whole of business hours, from June 10 to July 10 of each year whose duty it shall be to prevent persons from entering said

premises with lighted cigars, and to take such other precautions as may be necessary to insure the public safety.

6th. Any permit issued pursuant to the foregoing regulations may be revoked by the Board of Fire Commissioners at any time when, in their opinion, the public interests so require. All permits in force at the date of adoption of these regulations are hereby revoked.

7th. Nothing in these regulations contained shall be deemed to authorize the storage and sale of tableau or colored fires containing sulphur or sulphate in any form.

8th. An annual fee of twenty dollars will be charged for each permit issued hereunder.

### BUREAU OF INSPECTION OF BUILDINGS.

Plans and Specifications for Alterations to Buildings Filed and Acted Upon.

Classification.	Pending last Report	Received since.	Total.	Approved.	Amended and Approved.	Disapproved.	Now pending.	Total.	ESTIMATED COST.
Dwelling-houses	4	66 I	665	314	280	69	2	665	\$1,243,382 00
Flats		112	142	64	61	16	1	142	594,110 00
Tenement-houses	I	411	412	231	149	29	3	412	504,398 00
Hotels and boarding-houses		60	60	25	22	10	2	60	354,905 co
Stores	1	205	205	109	82	15		206	596,761 00
Office buildings	1	ico	101	38	49	14		101	1,719,632 00
Manufactories and workshops.	4	249	253	100	112	38	3	253	849,658 00
School-houses		22	22	13	7	2		22	126,126 00
Churches		17	17	6	11	• •		17	95,800 00
Public buildings		90	90	35	37	18		90	791,843 CO
Stables		70	70	31	30	9		70	198,870 00
Frame buildings	1	448	449	281	118	50		449	320,475 00
Totals	12	2,475	2,487	1,248	958	270	11	2,487	\$7,395 9 <sup>6</sup> 0 co

Plans and Specifications for New Buildings Filed and Acted Upon.

CLASSIFICATION.	Pending last Report.	Received since.	Total.	Approved.	Amended and Approved.	Disapproved.	Now pending.	Total,	ESTIMATED COST.
Dwelling-houses—Estimated		2	w 2		ı	I		2	\$140,000 00
Dwelling-houses—Estimated cost between \$20,000 and	2	87	89	46	38	5		89	2,221,500 '00
\$50,000)  Dwelling houses—Estimated cost less than \$20,000		*470	470	144	293	32	I	470	4,708,700 00
Flats—Estimated cost over	2	1,074	1,076	185	774	113	4	1,076	22,716,600 00
Tenement-houses—Estimated cost less than \$15,000		195	195	31	133	29	2	195	2,429,100 00
Hetels and boarding-houses		2	2	ı	1			2	26,000 00
Stores—Estimated cost over		25	25	3	18	4		25	1,744,000 00
Stores—Estimated cost be-		35	35	8	23	4		35	697,000 co
Stores—Estimated cost less than \$15,000		86	86	21	61	4		86	440,948 00
Office buildings		28	28	8	12	7	1	28	3,184,800 00
Manufactories and workshops.		149	149	32	91	26		149	3.272,435 00
School-houses		8	8	2	3	2	1	8	740,000 00
Churches		13	13	5	6	2		13	458,300 00
Public buildings-Municipal		13	18	3	12	3		18	1,105,802 00
Public buildings—Places of amusement, etc		10	10	4	4	I	I	10	736,000 00
Stables		79	79	24	48	$\epsilon$	1	79	735,425 00
Frame dwellings in Twenty- third and Twenty-fourth Wards		534	534	274	213	47		534	1,461,655 co
Other frame structures		266	266	149	85	32		266	470,879 00
Totals	4	3,081	3,085	940	1,816	318	11	3,085	\$47,289,145 co

Number of applications for permits for new buildings and alterations, 3,994.

# Complaints Received and Investigated.

NATURE.	Pending last Report.	Received since.	Total.	Unfounded.	Remedied on Verbal Notice.	Notices to be Issued.	Total.	Now pending.
Defective flues	8	46	54	33	10	9	52	2
Defective construction and materials.	2	35	37	25	,.	7	32	5
Defective leaders	8	349	357	III	43	III	265	92
Electric current cannot be cut off from outside of building		22	22			22	22	
Erecting and altering without permit.		100	100	54	I	38	93	7
Frame structures erected and re- moved without permit	11	190	201	102	4	83	189	. 12
Front iron shutters which cannot be opened from the outside	• •	7	7	• • •		4	4	3
Hoistway cpenings not guarded	ı	5	6	3	1	2	6	
Insufficient means of escape, fire- escapes out of repair, etc	882	1,055	1,947	663	204	860	1,727	220
No iron shutters	2	12	14	2		9	II	3
Stairway openings floored over	I	20	21	5	2	12	19	2
Steam-pipes too near woodwork	I	τ	2	1		ı	- 2	
Unsafe buildings	50	973	1,023	500	63	441	1,004	19
Unsafe freight elevators		6	6	6			6	
Totals	965	2,831	3,797	1,505	328	1,599	3,432	365

# Violations of Law and Unsafe Buildings.

Nature.	Pending last Report.	Received since.	Total for Disposition.	Removed before Action by Courts.	Removed on Order of Couts.	Dismissed by Courts.	Discontinued.	Total Final Disposition.	Now pending.	Forwarded for Prosecution.
Defective construction, ma-) terials, etc	97	770	867	630		2	37	659	198	628
ing without p rmit, or after disaproval) Insufficient means of escape,	214	790	1,004	726	4	16	31	777	227	673
fire-escapes, aisles ob-	387	3,774	3,561	2,316	1	2	316	2,635	926	1,377
structed, etc) Unsafe buildings	364	1,233	1,597	1,117	15		76	1,208	339	85
·Totais	1,062	5,967	7,029	4,789	20	20	465	5,289	1,740	2,763

Inspection of IN Number inspected  Found to be in good order and Found not in compliance with	nd fit	or us	• • • • • • • • • • • • • • • • • • •	 	2	2,576 2,359 217
Disposition of Passenger Ele- ance			Foun	d not	in Co	mpli-
Nature.	Pending last Report.	Received since.	Total.	Law complied with.	Now pending.	Forwarded for Prosecution.
Defective cylinders		13	13	13		
Defective car-bottoms	r		r	r		
Defective guide-rails posts	2		2	2		2
Defective running gear	ī	2	3	2	ı	1
Doors and door locks out of repair		I	I	I	••	
Fronts of cars unprotected	27	156	183	181	2	45
Generally unsafe	I	ı	2	2		
New ropes required	5	31	36	35	r	4
Run by persons under 18 years of age	••	10	10	10	••	••
Run by incompetent persons		3	3	3		
Totals	.37	217	254	250	4	52
Notice To place fire-escapes on build	res Iss					1,063
To place me-escapes on bunc To remove violations of law.						4,003 2,024
To repair passenger elevators						2,024 270
To remove unsafe buildings.						2,055 2,055
Of disapproval of plans						306
Total					=	3,718
Proceedings of 1	Board	of E	vamin	ers.		
Number of meetings held		_				52

Number of applicants for appointment as inspectors	
examined	25
Found qualified	10
Not qualified	15

# Petitions for Modification of the Law.

	Approved.	DISAPPROVED.	TOTAL.
New buildings	155	31°	187
Alterations	159	13	172
Iron shutters	8	5	13

New buildings commenced	2,691
New buildings completed	3,245
Alterations commenced	
Alterations completed	2,171

# Location of Buildings Commenced and Completed.

	Commenced.	Completed.	In Progress.
South of Chambers street	28	30	17
Between Chambers and Houston streets	179	215	89
Between Houston and Twenty-third streets	136	157	74
Between Twenty-third and Fifty-ninth streets	254	274	138
Between Fifty-ninth and One Hundred and Tenth streets, east of Eighth avenue	35=	474	298
Between Fifty-ninth and One Hundred and Tenth streets, west of Eighth avenue	362	539	514
Between One Hundred and Tenth street and Harlem river, east of Eighth avenue	441	676	463
Between One Hundred and Tenth street and Harlem river, west of Eighth avenue	141	109	136
North of Harlem river, south of One Hundred and Seventy-seventh street	533	541	403
North of Harlem river, north of One Hundred and Seventy-seventh street	266	230	112
Totals, 1883	2,691	3,245	2,184
Totals, 1887	3,687	3,702	••••
Totals, 1866	3,750	3,258	

# ATTORNEY TO THE DEPARTMENT. Violations of Law Relating to Combustibles, etc.

	For Disposition.			Disposed of.							
				COMM MEN	BEFORE COMMENCE- AFTER COMMENCEME MENT OF OF LITIGATION. LITIGATION.					r	
Nature of Violations	Pending last Report.	Received since.	Total.	Recalled—Violations Removed.	Recalled for other Reasons.	Violations Removed b fore Trial.	Judgment for Department.	Penalty Paid and Discontinued.	Dismissed.	Total.	Now pending.
Selling kerosene oil below test		1	ı					1		1	1
Selling kerosene oil without	2	128	130		93	22	6		9	130	
Combustible material in ex-	I		1	I					١	1	
Hoistways found open after (		6	6				••	}	5	5	I
Fireworks, chemicals, matches, etc., kept without permit	5	14	19		10	4			1	15	4
Totals	8	19	157	I	103	26	6	r	15	152	5

# Violations of Law Relating to Buildings.

	For	Dispo	SITION.	Disposed of.							
*				COMM	FORE ENCE- IT OF ATION.	AF			IENCEM	ENT	
Nature of Violations.	Pending last Report.	Received since.	Total.	Recalled-Violations Removed.	Recalled for other Reasons.	Violations Removed before Trial.	Violations Removed after Judgment.	Dismissed by Court.	Dismissed for Irregularity or Insufficiency of Papers.	Total,	Now pending.
Defective construction, materials, etc	102	628	730	295	16	188	17	2	19	537	193
Erecting, altering or remov- ing without permit or after disapproval	159	673	832	288	21	280	38	17	13	657	175
Insufficient means of escape, fire-escapes, aisles obstructed, etc	215	1,377	1,592	781	140	200	60	2	61	1,214	348
Unsafe buildings	37	85	122	r		69	18	1	5	94	23
Defective elevators	1	52	53	44		6	2			52	1
Lotals	514	2,815	3,329	1,409	177	743	135	22	98	2,584	745

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Miscellaneous Business.

NATURE.	PENDING LAST REPORT.	RECEIVED.	Total.	DISPOSED OF.	Now Pending.
Opinions required  Hotel cases — Rope fire-escape	3	14 53	17	15 73	84
Totals	107	67	174	89	85

# Received for Violation Combustible Laws.

Selling kerosene oil below test, \$50; paid to the Treasurer of the Relief Fund of the Fire Department, as required by law.

# For Violation Building Laws.

Fire-escape case No. 641 of 1886, judgment	\$50 00
Fire-escape case No. 2097 of 1886, judgment	59 50
Fire-escape case No. 822 of 1887, judgment	50 00
Fire-escape case No. 823 of 1887, judgment	50 00
Violation case No. 568 of 1887, judgment	50 00
Violation case No. 209 of 1887, judgment	100 00
Violation case No. 821 of 1887, judgment	100 00
Fire-escape cases Nos. 414, 427, and 491, of 1887,	
costs	30 00
Violation case No. 234 of 1887, judgment	100 00
Violation case No. 23 of 1888, judgment	100 00
Violation case No. 949 of 1887, judgment	50 00
Unsafe case No. 195 of 1886, survey fee	25 00
Violation case No. 610 of 1886, judgment	100 00
Fire-escape No. 264 of 1885, judgment	59 50
Violation case No. 472 of 1880, judgment	117 84
Fire-escape case No. 2892 of 1885, costs	5 00
Fire-escape case No. 2080 of 1886, costs	5 00
Fire-escape case No. 736 of 1888, costs	10 00
Unsafe case No. 177 of 1888, survey fee	25 00

Unsafe case No. 812 of 1887, survey fee	\$25 00
Unsafe case No. 595 of 1887, survey fee	25 00
Unsafe cases Nos. 462 and 463 of 1888, survey fee.	50 00
	\$1,186 84
Paid to the Comptroller, as required by law	1,051 84
Balance on hand	\$135 00

# Cases Against the Department.

Name of Plaintiff.	Pending Last Report.	Received.	NATURE OF ACTION.	Disposed of.	Now Pending.
The People ex rel. William Dodge	ı		Certiorari to review removal	Discontinued.	
The People ex rel. Timothy Sullivan,	1		Certiorari to review removal		1
No. î	ı		Certiorarı to review removal		1
The People ex rel. Peter H. Short	ı		Certiorari to review removal		1
The People ex rel. Francis J. Reilly	ı		Certiorari to review removal		1
The People ex rel. John Davis		1	Certiorari to review removal		ı
The People ex rel. William J. O'Connor.		ı	Certiorari to review removal		I
The People ex rel. Jos. Keegan		ı	Certiorari to review removal		1
The People ex rel. P. M. Smith		ı	Application for mandamus	Denied	
The People ex rel. George Kemp		1	Application for mandamus	Granted	
Thomas O'Connor	ı		Damages for personal injuries		1
Mary E. Pinckney, administratrix	ı		Damages for personal injuries		ı
James O'Brien	ı		Damages for personal injuries		1
Josephine Donnelly, an infant	ı		Damages for personal injuries		1
Thomas Heaney vs. John J. Cooney		ı	Damages for personal injuries	Discontinued.	
James Flynn vs. John J. Cooney		I	Damages for personal injuries	Discontinued.	
John Davis		ı	Claim for damages	Discontinued.	
Edward G. Dumahaut vs. John R. Shields	I		Claim for salary	Discontinued.	
	10	8		7	11

### FIRE-ALARM TELEGRAPH.

In a preceding part of this report reference is made to the effects of the great storm of March 12 and 13 upon the firealarm telegraph system. The damage was caused principally by the poles and wires of other telegraph systems breaking and falling upon the fire-alarm circuits, only thirty-one of the six thousand telegraph poles belonging to the Department being broken. But interferences with the lines continued for several weeks while the lines of the various telegraph companies and others were undergoing reconstruction. As a matter of course, the underground circuits, extending from the headquarter building for certain distances, were nowise affected by the storm, and this demonstrates the imperative necessity of placing all the fire-alarm wires underground with the least possible delay. In the year 1886 the Fire Commissioners applied for an appropriation of \$100,000 for that purpose, but no allowance was made, and though the same amount was asked for in 1887. only \$50,000 was appropriated. It was originally estimated that \$300,000 would be required for the entire work, so that the appropriation made will suffice for only one-sixth. work of placing the circuits of the Department underground was commenced under a contract for providing wires incased in lead cables, and laying them in the subways provided under the law by the construction company. This contract, when completed, will furnish underground connection with Headquarters by way of Lexington avenue, Fifty-eighth street, Eighth avenue to Forty-fifth street; also from Fifty-eighth street by way of Sixth avenue, Fourth street, South Fifth avenue, West Broadway, College place, Barclay street, New Church street, Exchange alley, Exchange place, Broadway and Whitehall street to Stone street; also from Fifty-eighth street by way of Broadway, Maiden lane, Pearl street and Stone street to Whitehall street.

The aggregate length of conductors in these conduits will be over two hundred miles, connecting with the apparatus houses

and other buildings below enumerated, and also with eighty fire-alarm signal-boxes, which latter will all be on combination lamps and box posts, and have keyless doors:

Chief of Department's Night Quarters and Apparatus House, 155 and 157 Mercer street.

Repair Shops, 130 and 132 West. Third street. Police Headquarters, 300 Mulberry street. News Bureau, opposite 300 Mulberry street. Engine Company No. 6—100 Cedar street.

" io—8 Stone street.

" 13—99 Wooster street.

" 14—14 East Eighteenth street.

" 18—132 West Tenth street.

" 23—235 West Fifty-eighth street.

" 29—193 Fulton street.

" 30—253 Spring street.

" 54—304 West Forty-seventh street.

Hook and Ladder Company No. 4-788 Eighth avenue.

" 8—7 North Moore street.

" 10—191 Fulton street.

The branch conduits between the main subways and alarm signal station posts and buildings are provided at the expense of the Department.

The work under the contract has been somewhat delayed, owing to the delay in completing the subways and to unfavorable weather, but it is now believed that the entire work will be finished during the next sixty days.

To connect all the fire-alarm signal stations and buildings of the Department underground, it will undoubtedly become necessary for the Department to construct the necessary ducts where general subways will not be provided.

The necessity for a complete fire-alarm underground service is made more apparent every day, and no efforts will be spared, on the part of the Department, to bring about that desirable result as early as possible. With that view, work will be commenced under the appropriation allowed for that purpose for the year 1889, amounting to \$50,000 (\$100,000 was asked for), as soon as the new routes over which subways are to be constructed, are defined.

The underground cables which are now and have been in use since 1884 continue to give good satisfaction, trifling damages caused by carelessness of steam and gas pipe workmen, causing temporary interferences only.

The present underground lines consist of the following:

- 1. Three hundred and forty-two thousand three hundred and fifty-four (342,354) feet, or nearly sixty-five (65) miles of conductors radiating from the Central Telegraph Office in the Headquarters building, laid in an aggregate length of six thousand five hundred and seventy-nine (6,579) feet, or nearly one and a quarter (1¼) miles of conduits. Of this quantity of conductors two hundred and fifty thousand (250,000) feet was purchased by the Department, the remainder having been furnished by the contractors, without obligation on the part of the Department, as a reserve in case of accident, and for purchase under future requirements, a portion of which has already been found necessary, and its purchase is recommended.
- 2. One hundred and thirty-nine thousand three hundred and fifty-four (139,354) feet, or nearly twenty-six and one-half (26½) miles, of conductors radiating from the former Headquarters in Mercer street, were laid in 1885, and have since formed a part of the system. These conductors have not yet been purchased by the Department.

As in 1887, the labor expended during the past year in maintaining the system in an efficient condition has, because of the various interferences of the numerous electric light and other wires with the overhead circuits of the Department, been very great. Sixteen (16) street alarm-boxes, two (2) telephones, four (4) apparatus house instruments, and one (1) each relay and testing instrument were damaged by electric light current contacts.

Six (6) street alarm-box doors (all of the old locked pattern), were broken into by persons unable to open them to transmit alarms, and three (3) locked boxes were maliciously broken open.

The following is a summary of the work of construction, reconstruction and repairing of overhead lines accomplished during the year:

115 miles of new wire, nearly all of the covered kind.

97 miles of old wire was taken down, nearly all of which was condemned as unfit for further use.

147 poles were set.

211 poles were reset.

187 poles were taken down, of which 152 were condemned.

627 box poles and 45 combination lamp and box posts were painted.

10 combination lamp and box posts were put up, and

10 old boxes with new keyless doors, were placed thereon.

4 locked boxes were added.

The overhead lines consists of 1,118 miles of wire and 6,640 poles.

The various kinds of alarm-boxes in use, with the number of each are as follows:

of each are as follows.	
Street alarm boxes, with locked doors	564
Street alarm boxes, with keyless doors, of which 42	
are upon combination lamp and box posts	126
Alarm-boxes in city institutions, etc	26
Alarm-boxes in public schools	131
Total alarm-boxes in public services	847
Special alarm-boxes in places of amusements,	
etc 174	
Duplicate alarm-boxes in places of amuse-	
ment, etc	
	222
Alarm-boxes of all kinds	1,069

Attention has been called to the necessity for a general overhauling and renewal of parts of the mechanism of the alarm-boxes and apparatus house electrical instruments, the greater part of which has been in continuous use for about twenty years, and has become considerably worn and otherwise deteriorated.

This old mechanism does not come up to the standard of the modern instruments, but for want of sufficient appropriation it has been impossible to do more than provide for absolutely necessary repairs. With these necessities provided for, and the advantages which may reasonably be expected to result from the underground service, the fire-alarm system of this city would be second to no other.

At present it may be safely said, as the facts heretofore stated show, that nowhere in this country, or so far as is known elsewhere, are the conditions so unfavorable to the proper maintenance of an electrical system composed mainly of overhead circuits, as in this city. Nor are such lawless practices and such defective and dangerous construction as various electrical companies in this city make use of, tolerated elsewhere.

Alarms and calls have been received and transmitted as follows:

First alarms from street boxes	_ 1,822
Second alarms	121
Third alarms	55
Alarms from special building boxes	30
Alarms from Police Department	. 5
Alarms from combination circuits	I
Alarms, verbal	_ 4
Alarms from Automatic Signal Company	53
Alarms from Thermostatic Signal Company	3
Alarms from American District Messenger Company	12
Special calls for companies	218
Special calls for police	2

Special calls for water tower	4
Special calls for increase of water pressure	108
Special calls, simultaneous	3
Special calls for Insurance Patrols	109
Special calls for ambulances	-
Special cans for ambulances	332
Special calls for Police boat	I
Special calls for Charities and Correction boat	- I
Notices of verbal alarms received by companies	1,118
Total alarms and calls	4,002
Number of Fire Alarm Keys in Use.	
By the Uniformed Force	1,028
By others in the Department	11
By the Police Department	
	3,500
By the Fire Insurance Patrol	147
By the District Telegraph Companies	26
By householders	2,299
By citizens	3,082
By the Holmes Electric Protective Company	63
By the Public Schools	_
by the rubile Schools	133
Total	10,289
= = = = = = = = = = = = = = = = = = = =	10,209
	-
SANITARY STATISTICS OF THE UNIFORMED FOR	CE.

# SANITARY STATISTICS OF THE UNIFORMED FORCE. Cases of Disability.

CAUSED BY—	Number.	DAYS LOST.
Injuries	238	7,036
Disease	592	9.762
Total	830	16,793

Examination of candidates for appointment to the Unifo	rmed
Force—	
Number found qualified	102
Number found disqualified	71
T . 1	
Total	173

# Deaths in the Uniformed Force.

NAME.	GRADE.	COMPANY.	DATE OF DATE OF APPOINTMENT. DEATH.	<b>ДАТЕ</b> ОБ <b>ДЕАТИ.</b>	CAUSE.
Charles M. Moore	Charles M. Moore Fireman, 1st grade Engine No. 45 Nov. 17, 1865 Jan. 12 Paralysis.	Engine No. 45	Nov. 17, 1865	Jan. 12	Paralysis.
Thomas Walker	Engineer of Steamer		Dec. 1, 1877	" I4	55 Dec. 1, 1877 " 14 Inflammation of bowels.
Joseph Weidman Fireman, 1st grade	Fireman, 1st grade	" 8 Oct. 1, 1868 Feb. 5 Consumption.	Oct. 1, 1868	Feb. 5	Consumption.
Robert Williams Foreman	Foreman	" 48 Dec. 1, 1865 March 4 Gun-shot wound	Dec. 1, 1865	March 4	Gun-shot wound.
Thomas C. Lee	Fireman, 1st grade	H. & L. No. 19 Oct. 20, 1865 " 12 Apoplexy.	Oct. 20, 1865	" 12	Apoplexy.
Michael J. Flynn	" 1st grade	Engine No. 16 Aug. 4, 1884 April 29 Consumption.	Aug. 4, 1884	April 29	Consumption.
James Meehan	" 1st grade	" 49 Oct. 27, 1865 May I	Oct. 27, 1865	May I	3
Joseph F. Manning	" 1st grade	" 52 Nov. 5, 1881 "	Nov. 5, 1881	7	•
Michael J. Nolan	" ist grade	H. & L. No. 13 July 21, 1871 " 23 Erysipelas,	July 21, 1871	" 23	Erysipelas,
James A. Dougan	**	1st grade Engine No. 1, Oct. 15, 1873 Oct. 21   Pneumonia	Oct. 15, 1873	Oct. 21	Pneumonia.

# Deaths among those Retired from all Service.

						1	-
NAME.	GRADE.	COMPANY.	DATE OF DATE OF APPOINTMENT. RETIREMENT.	DATE OF RETIREMENT.	CAUSE.	Вате ОБР ОБРАТН.	CAUSE.
Edward W. Wilhelm Chief of Battalion July 27, 1866 Aug. 12, 1884 Vertigo June 22 Apoplexy.	Chief of Battalion		July 27, 1866	Aug. 12, 1884	Vertigo	June 22	Apoplexy.
William W. Rhodes	3	Sept. 6, 1865 Nov. 1, 1881 Paralysis Sept. 25 Nervous prostration.	Sept. 6, 1865	Nov. 1, 1881	Paralysis	Sept. 25	Nervous prostration.
John F. Beechinor	Fireman, 1st grade Engine No. 29 Dec. 1, 1870 Nov. 1, 1877 Epilepsy Oct. 10	Engine No. 29	Dec. 1, 1870	Nov. 1, 1877	Epilepsy	Oct. 10	
Albert Stilwell	Engineer of Steamer	3	Dec. 22, 1871	Sept. 3, 1885	5 Dec. 22, 1871 Sept. 3, 1885 Rheumatism Nov. 1 Paralysis.	Nov. I	Paralysis.
Patrick J. McEntee	Fireman, 1st grade H. & L. No. 1 Jan. 3, 1873 Feb. 11, 1884	H, & L. No. 1	Jar. 3, 1873	Feb. 11, 1884	3	8	" 8 Pneumonia.
Joseph Saunders	:	1st grade   Engine No. 4   July 15, 1873   July 1, 1883	July 15, 1873	July 1, 1883	:	Dec. 6	Dec. 6 Heart disease.
			3	-			

Death among those Relieved from Service at Fires.

	CAUSE.	Phthisis.
And the Party of t	ОРТЕ ОР	July 31
	CAUSE.	Phthisis July 31 Phthisis.
	WHEN RELIEVED.	May 17, 1888
	DATE OF APPOINTMENT.	Jan. 9, 1878
	COMPANY.	Engine No. 50 Jan. 9, 1878 May 17, 1888
A CANADA	GRADE.	Engineer of Steamer
The state of the s	. NAME.	William J. Kerneghan

# Relieved from Service at Fires During the Year.

CAUSE.	Sept. 14, 1865 May 16 Rheumatism.	16 Paralysis,	16 Stiff ankles.	16 Consumption.	;	" 16 Stiff ankle.	Feb. 1, 1874 June 1 Weak lungs.	13 Tumor of head.	27 Rheumatism.	27 Stiff ankle.	Jan. 21, 1867 Aug. 9 Rheumatism.	*	10 Near-sighted.	10 Rheumatism.
TE RE- ED.	91	91	91		91	91		13	27	27	6	OI	10	
DATE WHEN RI LIEVED.	May	"	"	"	"	:	June	"	*	ä	Aug.	Oct.	:	ä
DATE OF WHEN RE-	t. 14, 1865	Dec. 18, 1874	Sept. 9, 1874	Jan. 9, 1878 "	Mar. 20, 1882 "	Aug. 20, 1884	, I, 1874	Dec. 1, 1871 "	. 16, 1873	I, "	21, 1867	Oct. 1, 1872 Oct.	" 15, 1874 "	15, 1873
APP	Sep	Dec	Sep	Jan	Ma	Aug	Feb	Dec	Oct	"	Jan	Oct		Jan
COMPANY	Engine No. 4	39	H. and L. No. 17	Engine No. 50	53	47		Engine No. 34	, 19 Oct. 16, 1873	8	38	35.	, 47	36 Jan. 15, 1873
	Engin	"	H. and	Engin	*	*		Engin	"	;	"	3	3	3
GRADE.	Assistant Foreman	Fireman, 1st grade	" ist grade	Engineer of Steamer	Fireman, 1st grade	" ist grade	Chief of Battalion	Fireman, 1st grade	Foreman	Fireman, 1st grade	" 1st grade	Assistant Foreman	Engineer of Steamer	Fireman, 1st grade
МАМЕ.	Oscar Pesoa	Edward Hogan	Jacob Maug	William J. Kerneghan	Charles Forbach	Peter Prunty	Thomas Gooderson	Joseph Brandon	John Dwyer	James Daly	John Hart	Michael Neubauer	Patrick Burns	William S. Hughes

# Apparatus.

The following new apparatus was purchased during the year:
The new steam fire-engines (see "Description of Steam Fire
Engines" in a subsequent part of this report for particulars),
two four-wheeled hose tenders, one Hayes' extension hook and
ladder truck, one aerial turn-table hook and ladder truck, and
one battalion wagon.

The following apparatus having been condemned as unfit for further use as a whole, but of which parts could be utilized in making repairs to other apparatus, were ordered to be broken up:

One second size Amoskeag steam fire-engine, registered No. 132, built in 1865.

One goose-neck hook and ladder truck, built before 1865. One two-wheeled tender, old pattern, built about 1865.

# Repair Shop Work.

The following extensive repairs were made:

Thirty-six to steam fire-engines, one to floating engine, twenty to hose tenders, five to hook and ladder trucks, one to water tower, and three to battalion wagons, two to light wagons, and three to shop wagons.

The following ordinary repairs were made:

One hundred and ninety-six to steam fire-engines, seven to floating engines, sixty-four to hose tenders, seventy-five to hook and ladder trucks, three to water-towers, one hundred and fifty-three to battalion wagons, sixty-one to light wagons, six to telegraph trucks, five to shop wagons, two to sleighs.

Two sets of sliding poles were put up in company quarters. Two sets of single harness, two sets of double harness, two sets of wagon harness, and a large number of bridles and other parts of harness were made and furnished.

A large amount of miscellaneous repairs to apparatus, hose and harness and painting was also done.

The following articles were furnished to various companies, etc.:

Five jumping nets, six copper cellar pipes, seventeen 35-foot rope ladders, forty-nine 25-foot rope ladders, six sets of scaling ladders, thirty hose rollers, four sub-cellar pipes and nozzles, thirteen Prunty patent controlling nozzles, twenty hydrant connections, thirty-four thousand seven hundred and fifty feet of hose.

Inventory of Apparatus.

		In Service.	Spare.	TOTAL.
Marine steam fi	re-engines (Engine Companies Nos. 43 and 51)	2	••	2
	First size	7	9	. 16
	Second size	34	11	- 45
Steam fire-eng:	nes { Third size	4	4	8
	Fourth size	15		15
	Fifth size	2		2
Hose-tenders, i	our-wheeled	36	6 .	42
Hose-tenders,	two wheeled	30	13	43
Water-towers.		2	r	3
	( 1st size.	14	4	18
	Roller-frame with extension ladder 2d size.	6	1	7
Hook and lad-	Goose-neck without extension ladder	2	4	6
	Roller-frame, without ladders, first size		1	ı
	Turn-table, first size	4		4
	Turn-table, second size	ī		1
Chemical fire-e	ngines		10	10
		16	r	17
J	C		ī	-/ T
_	extinguishers	139		139
	Acting and the second s	.39	3	3
ŭ			, j	, i
				14
		т.	14	1
,				
	on wagons	12	5	17
Portable water	tank		I	I

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# Inventory of Hose.

	Size.	Number of Feet.
Combination rubber hose	2 inch.	200
	21/2 "	97,636
" tapering from	3½ to 2½ "	963
" "	31/4 "	3,584
	3½ "	58
٠٠ ٠٠	4 "	62
	6 "	100
Cotton rubber lined hose	a½ "	97,901
" "	31/4 "	50
" "	3½ "	1,010
Cotton hose (not lined).	21/2 "	634
Linen hose	21/2 "	10
Total		202,208

# Classified Description of

-	-	STYLE OF—			Size in		Water	r ervice.
Size.	Frame.	Boiler.	Engine.	Steam Cylinder.	Stroke of Piston,	Pump.	Weight with	When built or placed in service.
ı	Barrel tank	Tubular	Double	8	12	41/4	8,800	Sept., 1865
1	"	Drop tube	"	8	12	4¾	8,800	Sept., 1865
1	"	, "	"	8	12 .	41/4	8,800	Sept., 1866
ı		"	٠٠٠	8	12	41/4	8,800	Sept., 1866
1	"	"	"	8	12	41/4	8,800	Oct., 1866
1		Tubular	"	8	12	41/4	8,800	Nov., 1866
ı	* Straight frame	Drop tube	"	81/2	8	43/4	9,600	Oct., 1872
1	* Crane neck	"	"	75/8	8	4½	8,000	Sept., 1874
1	66	"	"	75/8	8	41/2	7,320	Mar., 1879
1	66	Coil	"	71/4	8	41/2	7,575	Sept., 1880
1		Drop tube		8	7	47/8	7,450	Oct., 1880
1		"	66	8	7	5	7,450	Oct., 1880
1	66	"	"	81/8	7	5	7,890	June, 1882
1	61	"	٠٠.	81/8	7	5	8,110	July, 1882
1	"	"	"	81/8	7	5	7,890	Aug. 1882
1	46	"	"	81/8	7	5	7,890	Sept., 1832
2	U tank	Tubular	Single	8	12	43/4	6,750	Dec., 1860
2	"	"	"	8	12	43/4	6,750	Oct., 1865
2	"	"	"	8	12	43/4	6,750	Nov., 1855
2	"	"	"	8	12	43/4	6,750	Dec., 1865
2	"	Nest tube	"	8	12	43/4	6,520	Dec., 1865
2	"	Tubular	"	8	12	43/4	6,750	Jan., 1856
2	"	Nest tube	"	8	12	43/4	6,750	Jan., 1866
2	"	Drop tube	"	8	12	43/4	6.750	Feb., 1866
2	"	"	"	8	12	43/4	6,730	Feb., 1856
2	66	66	66	8	12	43/4	6,750	Mar., 1866
2	"	Tubular	"	8	12	43/4	6,750	Apr., 1856
2	"	Sectional coil tube	٠٠	. 8	12	43/4	6,750	Apr, 1866

<sup>\*</sup> Formerly self-propellers.

# Steam Fire Engines.

Manufacturer's-	-		New Boilers, Pumps, Etc.	
Name.	Number.	When.	By Whom.	Engine Company now Using.
Amoskeag Mfg. Co	142	Sept., 1877	Rebuilt at Repair Shops	Spare.
"	143	Nov., 1883	New boiler, Clapp & Jones Mfg. Co	"
"	191	Apr., 1883	" " …	"
	192	Nov., 1877 Mar., 1882	New pumps, Amoskeag Mfg. Co	
"	193	June, 1884 May, 1883	New boiler, Clapp & Jones Mfg. Co.)	٠.
"	195		•••••	
***	284	Feb., 1380	Altered for horses, and new boiler,	
	494 {	Feb., 1880 May, 1883 Apr., 1884	Clapp & Jones Manufacturing Co New tubes, Repair Shops New boiler, Clapp & Jones Mfg Co { Altered, for horses, Clapp & Jones	66
	527	Feb., 1881	Manufacturing Co	6.
Ahrens Mfg. Co	252	Nov., 1880	New coil in boiler, Ahrens Mfg. Co	No. 13.
Clapp & Jones Mfg. Co.	351	Oct., 1880	New tubes in boiler, Clapp & Jones Mfg.	
	352	Jan., 1883	Co New pump, Clapp & Jones Mfg. Co	33. 7.
4.6	<sub>3</sub> 85		••••••	14.
66	381			ı.
"	383			19.
66	385			55-
Amoskeag Mfg. Co	19		•••••	(Ward's Island
"	147	July, 1879	New boiler, Amoskeag Mfg. Co	No. 26.
"	148	Apr., 1879	"	Spare.
	157	July, 1878		66
	158 {	July, 1879 Oct., 1888	New boiler, La France Mfg. Co	No. 36.
	159	Nov., 1879	New boiler, Amoskeag Mfg. Co	Spare.
"	ıεο	Sept., 1879	New boiler, Manchester Locomotive	NT.
"	161 {	Nov., 1874 May, 1884 July, 1875	Works.  New boiler, Repair Shops.  New boiler, Clapp & Jones Mfg. Co.  New boiler, Repair Shops.	No. 12. Spare.
	162 {	July, 1885	New boiler, Clapp & Jones Mfg. Co.	4.6
66	163	Sept., 1881	" " …	66
•••	164	Dec., 1874 Nov., 1879	New boiler, Repair Shops New boiler, Manchester Locomotive	6.6
	165	Aug., 1886 Sept., 1888	Works.  New boiler, Clapp & Jones Mfg. Co. New coil for boiler, Clapp & Jones  Manufacturing Co.	No. 16.

		STY. E O —		Inc	Size in	F	Water.	service.
Size.	Frame.	Boller.	Engine.	Steam Cylinder.	Stroke of Piston.	Pump.	Weight with Water	When built or placed in service.
2	U tank	Tubular	Single	8	12	43/4	6,750	Aug., 1866
2	Straight frame	Sectional coil tube	Double	67/8	8	41/8	6,700	Mar., 1867
2	"	Drop tube	"	67/8	8	41/8	6,700	Mar., 1867
2	" …		"	67/8	8	41/8	6,700	Mar., 1867
2	***		"	67/8	8	41/8	6, <b>7</b> co	Apr., 1867
2	"		"	67/8	8	41/8	6,700	May, 1867
2	"		"	67/8	8	41/8	6,700	Aug., 1868
2		Nest tube	46	67/8	8	41/8	6,700	Sept., 1868
2	"	Tubular	"	67/8	8	41/8	6,700	Sept., 1858
2	"	Nest tube	**	67/8	8	4 <sup>1</sup> /8	6,700	Nov., 1868
2	Crane neck			71/4	8	45/8	8,250	July, 1886
2	"	Sectional coil tube	**	7½	7	4 7/8	7,240	May, 1887
2	"	Drop tube	"	67/8	8	41/8	6,800	Feb., 1871
2	"	"	"	67/8	8	41/8	6,800	Feb., 1871
2	"	"	"	67/8	8	41/8	6,800	Mar., 1871
2	"	"	"	67/8	8	41/8	6,800	Mar., 1871
2	"	"	"	67/8	8	41/8	7,385	Mar., 1871
2	"	Tubular	"	67/8	8	4 1/2	7,250	June, 1873
2	` "	Drop tube	"	67/8	8	41/4	6,950	June, 1873
2	"	"	"	67/8	8	41/4	6,950	July, 1873
2	"	66	"	67/8	8	41/4	6,950	Sept., 1873
2	"	"	"	67/8	8	41/4	6,950	Sept., 1873
2	"	"	"	67/8	8	41/4	6,950	Sept., 1873
2	"	Tubular	"	63/4	8	41/4	6,800	Nov., 1868
2	"	Coil		63/4	8	41/4	6,210	July, 1883
2	"	"	66	63/4	8	41/4	6,210	July, 1883
2	66	Drop tube		71/2		474	6,550	July, 1883
2	,,	"		772	7	478	6,485	Aug., 1883
2	"	٠٠٠٠٠٠	Rotary		7	4/8	6,400	July, 1884
2				9	)		6,885	July, 1885
- 1		Sectional coil tube	Double	7½	7	45/8		Aug., 1886
2		Sectional con tube		7 1/2	7	4 1/8	6,740	Aug., 1000

Manufacturer's-	-		New Boilers, Pumps, Etc.	
Name.	Number.	When.	By Whom.	ENGINE COMPANY NOW USING.
Amoskeag Míg. Co	166	Oct., 1879	New boiler Amoskeag Mfg. Co	Spare.
"	225 {	Sept., 1879	M	No. 28.
***	227	Aug., 1883 Oct., 1875 Apr., 1882	New boiler, Clapp & Jones Mfg. Co. \\ New boiler, Repair Shops\\ New boiler, Clapp & Jones Mfg. Co. \\ \}	31.
	228		"	21.
"	220 {	July, 1880 Feb., 1878 Sept., 1881	New tubes in boiler, Repair Shops New boiler, Clapp & Jones Mfg. Co.	25.
"	230	Aug., 1886 Oct , 1881	New pumps, " .) New boiler, "	5.
		Mar., 1881		
	295	Aug., 1879	New boiler, Amoskeag Mfg. Co	27.
	295 {	Mar., 1885	New boiler, La France Mfg.Co	39.
*	301	Nov., 1876 Apr., 1879	New boiler, Repair Shops	Spare.
**	302 {	Aug., 1888	New boiler, Amoskeag Mfg. Co	No. 34.
La France Mfg. Co	108	•••••		9.
Clapp& Jones Mfg. Co.	491		•••••••••••••••••	24.
Amoskeag Mfg, Co	359	May, 1883	New boiler, Clapp & Jones Mfg. Co	23.
"	350	July 1884	" " …	15.
"	361	Sept., 1883	" "	6.
"	362	April, 1883		30.
	363	April, 1 83		11.
"	437	Aug., 1880		
46		¥ 00	New pumps, new crown sheet, new tubes and sheet in furnace, Manchester Locomotive Works	8.
	438	June, 1882	New boiler, Clapp & Jones Mfg. Co	54-
**	439	July, 1883		12.
"	440	June, 1884	• • • • • • • • • • • • • • • • • • • •	29.
"	441	Sept., 1880	" "	3.
"	455 {	May, 1882 July, 1884	New pump, Repair Shop	16.
Gould	7	Dec., 1880	New boiler, Repair Shops	Ward's Island.
Ahrens Mfg. Co	358	Mar., 1888	New coil in boiler, Ahrens Mfg. Co	No. 13.
"	360			20.
Clapp & Jones Mfg. Co.	413			32.
"	415			27.
Silsby Mfg. Co	730	Feb., 1888	New pumps, Silsby Manufacturing Co.	17.
C'app & Jones Mfg. Co.	453		Tarray and an analysis of the state of the s	
"				31.
	473			4.

		STYLE OF			Size in		Water.	r service.
Size,	Frame.	Boiler.	Engine.	Steam Cylinder.	Stroke of Piston.	Pump.	Weight with Water	When built or placed in service
2	Crane neck	Nest tube	Double	73/4	8	41/2	8,230	Aug., 1883
2	"		"	73/4	8	4 1/2	8,675	Aug., 1888
3	Harp tank	Drop tube	Single	73/1	9½	41/4	5,550	May, 1861
3	"			73/4	9	43/8	5.700	Dec., 1876
3	"	Tubular	**	73/4	9	43/8	5,700	Feb., 1877
3	"	Nest tube		73/4	9	43/8	5,700	Feb., 1877
3	"			73/4	9	43/8	5,700	Feb., 1877
3	Straight frame	Coil	"	8	7	5	4,665	July, 1883
3	"	"	٠٠٠.	8	7	5	4,665	July, 1883
3	Horizontal	Tubular		6	10	41/2		Aug., 1865
4	Crane neck	Drop tube	"	91/4	6	51/2	5,750	July, 1881
4	"	"	"	91/4	6	5½	5,750	July, 1881
4	"		"	91/4	6	51/2	5:750	July, 1881
4	"	"	"	91/4	6	5½	5,300	Oct., 1881
4	"	"	"	91/4	6	51/2	5,300	Oct., 1881
4	"		"	91/4	6	51/2	5,3co	Nov., 1881
4	"		"	91/4	6	51/2	5,300	Dec., 1881
4			"	91/4	6	51/2	5,950	April, 1884
4	"		"	9 <sup>1</sup> / <sub>4</sub>	6	51/2	5,950	April, 1884
4	"		"	91/4	6	5½	5,950	May, 1884
4		66	"	91/4	6	5½	5,950	May, 1884
4	"	٠٠٠٠٠٠	"	91/4	6	51/2	5,950	May, 1884
4	"			91/4	6	51/2	5,950	June, 1884
4	Straight frame		"	91/4	6	51/2	4,750	July, 1883
4	"	"	"	91/4	6	5½	4,745	Aug., 1883
5	Crane neck		"	7½	6	45/8	4,680	Nov., 1882
5	"		"	7½	6	4 7/8	5,030	Nov., 1884
1	Marine engine	Tubular	Double	§ 11	12	5	)	May, 1875
1	manife engine		Double	(11	12	5	}	may, 10/5
ı	66	66	66	(16	9	7½		Apr., 1883
	•••			(16	9	7½	} ,	, 1003

Manufacturer's-		+	New Boilers, Pumps, etc.	
Name.	Number.	When.	By Whom.	Engine Company now Using.
La France Mfg. Co	146			18.
"	147			5.
Amoskeag Mfg. Co	36	Oct., 1879	New boiler, Clapp & Jones Mfg. Co	Spare.
"	516	April, 1884		"
"	517			No. 37.
"	519	July, 1888	New boiler, La France Mfg. Co	38.
	520	June, 1882	New tubes in boiler, Clapp & Jones Mfg. Co	Spare.
Ahrens Mfg. Co	354			No. 45.
	356			42.
Clapp		Jan., 1867	New boiler, Amoskeag Mfg. Co	Randall's
Clapp & Jones Mfg. Co.	359			No. 10.
"	362			44-
**	365			53-
"	368		· · · · · · · · · · · · · · · · · · ·	33•
66	370	*******		40.
66	371			No. 49.
66	375			41.
44	430			18.
66	432			22.
66	433	:		47-
66	434			2.
4.6	436			26.
66	438			35.
66	409			48.
66	417			46.
4.6	397			50.
44	452			52.
Amoskeag Mfg. Co }	5 <sup>13</sup> }	May, 1882 Dec., 1886 July, 1888	New legs in boiler	} 43.
{Clapp & Jones Mfg. { Co, pumps	405 } 406 }	June, 1886	New legs in boilers, new fresh water tanks, and connections	51.

146

Description of Hook and Ladder Trucks.

	ow Using.	adder Co.1.	6	ů	4	, vî	'n	.9	7.	ಹ	6	6	IO.	11.	12.	13.	14.	15.
	COMPANY NOW USING.	Hook and Ladder Co.1.	3	*	3	4	3	*	*	*	3	9	3	*	3	*	*	*
	BUILT ACED VICE.	1869	1871	1886	1888	1869	1873	1883	1872	1884	1883	1870	1879	1881	1886	1878	1888	1883
	WHEN BUILT OR PLACED IN SERVICE.	Dec., 1869	Nov.,		Sept.,	Jan.,		May,	*	*	June,				June,		July,	3
	Longest Ladder.	70 feet extension																
	Long	70 feet exter	,, 0/	85 "	,, 26	,, 59	,, 59	73 "	,, 0,	73 "	,, 02	,, 0/	73 "	,, 65	85 "	., 59	75 "	73 "
	Manufacturer.	Fire Dep't Repair Shops	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	La France Mfg. Co	Fire Extinguisher Mfg. Co	Fire Dep't Repair Shops	3	Fire Extinguisher Mfg. Co	Fire Dep't Repair Shops	33	Fire Extinguisher Mfg. Co	Allerton Mfg. Co	Fire Dep't Repair Shops	***	La France Mfg. Co	Fire Dep't Repair Shops	La France Mfg. Co	Roller frame Fire Extinguisher Mfg. Co
	STYLE.	Roller frame	***	Turn-table	***************************************	Roller frame	***************************************	***************************************	***************************************	, ,	***************************************	*	*	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Turn-table	Roller frame	Turn-table	Roller frame
	Size.	ıst	ıst	ıst	ısı	ıst	ıst	ıst	ıst	ıst	ıst	ıst	ıst	ıst	ıst	ıst	pz	ıst
	Department   Registered No.	9	10	30	33	7	14	24	11	28	25	00	18	61	31	17	34	92

, r6.	., 17.	** I.8.	" I9.	Engine Company 38.	47.	48.	.49.	., 50.	.52.	Spare, 4th Battalion.	H	4th "	Н. & L., 13	6 ,,	Ward's Island.	Randall's Island	eable.		
	·			Engine							" roth	" 4t	" H.	*	M ,,	" Ra	Unserviceable.	Spare.	
1887	1877	1872	1865	1883	1882	1882	1865	1882	1885	1872	1873	1870	1882	1865	1865	1865	1878	Before 1865	
;	Scpt.,		Before 1865			April, 1882	Before 1865	Sept., 1882	June,					Before 1865	3	*		Before	
*	,, Scpt.,	3	30 feet	50 feet extension	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	set.	set	50 feet extension	***	***	99	;	***	40 feet	3	***		40 feet	
85	20	65	30 fe	so fe	50	35 feet.	40 feet	So fe	20	72	72	70	20	40 fe	40	30	:	40 fe	:
La France Mfg. Co	Fire Dep't Repair Shops	99 99		Fire Extinguisher Mfg. Co	Fire Dep't Repair Shops	***************************************		Fire Dep't Repair Shops	Fire Extinguisher Mfg. Co	Fire Dep't Repair Shops	33	Allerton Mfg. Co	Fire Extinguisher Mfg. Co				Babcock Mfg. Co		
Turn-table	Roller frame	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Goose neck	Roller frame	;	**	Goose neck	Roller frame		**	, , , , , , , , , , , , , , , , , , , ,	***************************************	"	Goose neck	, , , , , , , , , , , , , , , , , , , ,		Roller frame	Goose neck	Roller frame
ıst	2d	ıst	3d	2d	24	2d	3d	2d	pz	ıst	ıst	ıst	2d	3d	3d	3d	ıst	3d	ıst
32	91	12	2	27	20	21	4	55	50	13	15	6	23	c	a	н	1	35	36

### HORSES.

December 31, 1887, number of horses on hand Purchased since	46	202
Died	12	383
Sold		
		31
December 31, 1888, number on hand	:	352
On Probation.		
December 31, 1887		
Received		
Accepted	46	121
Rejected		
· ·		110
Remaining on probation December 31, 1888.	-	ΙΙ

## DEPARTMENT BUILDINGS AND SITES.

# New Buildings.

The new quarters for Engine Company No. 54, at No. 304 West Forty-seventh street, were finished and occupied by the company named.

A contract was also made for building new quarters for an engine company in West Eighty-third street, and for Hook and Ladder Company No. 14, at No. 120 East One Hundred and Twenty-fifth street. Both of these buildings were well advanced towards completion at the close of the year.

# Alterations and Repairs to Buildings.

Extensive alterations and repairs were made to the following buildings:

Engine Companies Nos. 24, 30 and 31, and at No. 155 Mercer street, and Hook and Ladder Company No. 20, and temporary quarters for Hook and Ladder Company No. 14.

Ordinary repairs, involving various kinds of mechanical work, were also made to the buildings of the Department, aggregating sixty different jobs of work.

## New Sites.

The purchase of the two lots, located respectively on the south side of Eighty-third street, about two hundred feet west of Ninth avenue, and on the south side of One Hundred and Thirteenth street, about sixty feet west of Tenth avenue (referred to in the report for 1887), which was then under consideration by the authorities, was completed early this year.

# Buildings and Sites Occupied by or Under Control of the Department.

Headquarters—Office of Commissioners, Bureaus—Chief of Department, Inspector of Combustibles, Fire Marshal and Superintendent of Buildings, and offices of Attorney, Fire Alarm Telegraph and Medical Officers, and School of Instruction, Nos. 157 and 159 East Sixty-seventh street, with drill yard in rear, extending to Sixty-eighth street.

Night Quarters, Chief of Department, etc., Nos. 155 and 157 Mercer street.

Repair Shops, Nos. 130 and 132 West Third street.

Hospital Stables, Nos. 133 and 135 West Ninety-ninth street.

Training Stables, No. 58 Lawrence street.

Bell-tower and Lookout, Mount Morris Square.

Bell-tower and Lookout, Fulton avenue, between One Hundred and Sixty-seventh and One Hundred and Sixty-eighth streets, rear of quarters of Engine Company No. 42.

Lookout, southwest corner of Tenth street and Sixth avenue, Jefferson Market Court-house.

Engine Company No. 1, No. 165 West Twenty-ninth street.

" 2, No. 530 West Forty-third street.

(Fuel Depot No. 5.)

3, No. 417 West Seventeenth street.

Engine Company	No. 4, No. 39 Liberty street.
"	5, No. 340 East Fourteenth street.
66	6, No. 100 Cedar street.
66	7, No. 22 Chambers street.†
66	8, No. 165 East Fifty-first street.
66	9, No. 55 East Broadway.
66	10, No. 8 Stone street.
66	11, No. 437 East Houston street.
66	12, No. 261 William street.
66	13, No. 99 Wooster street.
66	14, No. 14 East Eighteenth street.
66	15, No. 269 Henry street.
٤6	16, No. 223 East Twenty-fifth street.
"	17, No. 91 Ludlow street.
"	18, No. 132 West Tenth street. (Fuel
	Depot No. 4.)
"	19, No. 355 West Twenty-fifth street.
	(Fuel Depot No. 12.)
"	20, No. 47 Marion street.
	21, No. 216 East Fortieth street.
"	22, No. 159 East Eighty-fifth street.
	(Fuel Depot No. 14.)
"	23, No. 235 West Fifty-eighth street.
"	24, No. 78 Morton street. (Fuel Depot
	No. 9.)
"	25, No. 342 Fifth street.
"	26, No. 220 West Thirty-seventh street.
"	27, No. 173 Franklin street.
"	28, No. 604 East Eleventh street.
"	29, No. 193 Fulton street.
"	30, No. 253 Spring street.*
"	31, No. 116 Leonard street.
"	32, No. 108 John street.*
"	33, No. 15 Great Jones street.
66	34, No. 440 West Thirty-third street.

Engine Company No. 35, No. 223 East One Hundred and

Nineteenth street. 36, No. 2333 Fourth avenue. 37, No. 83 Lawrence street.

38, Tenth avenue, between One Hun-

	30, Tenth avenue, between One Trull-
	dred an Fifty-fourth and One
	Hundred Fifty-fifth streets.
46	39, No. 157 East Sixty-seventh street.
"	40, No. 153 West Sixty-eighth street.
66	41, No. 501 North Third avenue.
"	42, Fulton avenue, between One Hun-
	dred and Sixty-seventh and
	One Hundred and Sixty-eighth
	streets.
66	43, (Floating engine Wm. F. Have-
	meyer), foot of Clinton street,
	East River.
66	44, No. 221 East Seventy-fifth street.
66	45, North side Tremont avenue, be-
	tween Southern Boulevard and
	Vyse street.
66	46, Morris street, between Madison
	and Washington avenues.*
۲۴	47, Tenth avenue, between Ninety-
	seventh and Ninety - eighth
	streets.
• 6	48, Webster (formerly Thomas) avenue,
	near Kingsbridge road.
46	49, Blackwell's Island.
6	50, One Hundred and Sixty-sixth
	street, between Washington and
	Third avenues.
6.	51, (Floating engine Zophar Mills),
	foot of West Thirteenth street.
6.	52, Riverdale avenue, near junction
	of Westchester avenue.

Engine Comp	any No. 53,	No. 175 East One Hundred and
		Fourth st. (Fuel Depot No. 15.)
	54,	No. 304 West Forty-seventh street
		(temporary quarters, No. 219
"		West Forty-sixth street.)
		No 173 Elm street.
Hook and Lac	dder Compa	ny No. 1, No. 26 Chambers street.†
66	"	2, No. 126 East Fiftieth st.
		(Fuel Depot No. 13.)
46	66	3, No. 108 East Thirteenth
		street.
6.6	44	4, No. 788 Eighth avenue.
6.	66	5, No. 96 Charles street.
= "	66	б, No. 77 Canal street.
: 6	6.6	7, No. 217 East Twenty-
		eighth street.
66	66	8, No. 7 North Moore street.
6.	66	9, No. 209 Elizabeth street.
••	64	10, No. 191 Fulton street.
	4.6	11, No. 742 Fifth street.
	. 6	12, No. 243 West Twentieth
		street.
#4	44	13, No. 159 East Eighty-
		seventh street.
66	6.6	14, No. 120 East One Hun-
		dred and Twenty-fifth
		street.
		15, Old Slip, between Water
		and Front streets.
6.	4 6	16, No. 159 East Sixty-
		seventh street.
66	( 6	17, One Hundred and Forty-
		third street, near Third
		avenue. (Fuel Depot
		No. 16.)

Hook and La	adder Company No. 18, No. 84 Attorney street.
"	" 19, Ogden avenue, between
	Birch and Union sts.*
Fuel Depot	No. 1, No. 5 Duane street.
66	2, No. 160 East Thirty-third street.
66	3, No. 106 East Thirteenth street.
4.6	4 (see Engine Company No. 18).
46	5 (see Engine Company No. 2).
46	6, No. 180 Clinton street.
46	7, No. 28 Beaver street.†
46	8, No. 209 East One Hundred and
	Twenty-second street.
44	9 (see Engine Company No. 24).
"	10, No. 304 Washington street.
"	11, No. 199 Chrystie street.
44	12 (see Engine Company No. 19).
. 6	13 (see Hook and Ladder Company No. 2).
64	14 (see Engine Company No. 22).
"	15 (see Engine Company No. 53).
"	16 (see Hook and Ladder Company No.
	17).
Store-house,	No. 20 Eldridge street.
6.6	No. 180 Clinton street. (Fuel Depot No. 6).
66	No. 199 Chrystie street, also occupied by
	second section of Hook and Ladder Com-

Division street, near Boston road. No. 432 West Thirty-sixth street.

66

pany No. 9 and Fuel Depot No. 11.

The locations marked thus (\*) are leased by the Department; all others are city property. The locations marked thus (†) are only in part occupied by the Department. At the locations marked thus (||) lots in rear or adjacent are leased by the Department.

RECEIPTS AND DISBURSEMENTS OF THE RELIEF FUND—1871-1888.

## Receipts.

From—	1871. 7 Months.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.
Met. Fire Dept. Relief Fund.	\$7,340 07		:	:			:			
Fines	646 51	\$621 64	\$843 3r	\$734 79	\$972 5I	\$567 IS	\$489 46	\$568 98	\$268 c3	\$1,068 89
Donations	:	100 00	00 090'I	374 00	:	100 00	:	00 001	•	:
Penalties	:	170 63	902 34	705 00	2,389 63	1,600 00	1,925 00	1,250 00	350 00	400 00
Oil licenses	26,230 00	27,528 50	30,399 50	31,827 50	29,454 50	27,285 00	30,103 00	29,750 00	30,300 00	29,760 00
Fireworks permits	495 00	209 00	537 00	522 75	519 25	645 50	472 25	332 75	355 00	363 50
Interest	275 55	98 666'ı	4.258 91	9,298 22	10,410 44	11,795 22	19 012,71	15.493 9o	18,680 49	22,140 20
Foreign insurance tax		9,942 30	12,072 04	16,136 25	15,281 24	12,878 98	12,112 10	16,630 02	17,582 80	:
Powder licenses	:	211 00	571 50	241 50	305 50	385 50	384 50	192 00	180 00	178 00
Special permits	:	:	11	:	:	:	:	258 00	274 00	328 00
Chimney fires	:	245 00	440 00	375 00	355 00	245 00	260 00	240 00	180 00	290 00
Fires in street permits	:	:	:	:	:	50	41 75	85 00	64 00	56 50
Sales—Seized combustibles	:	:	24 25	:	:		:	:	6 30	10 00
Sales-Sample oils	:	:	:	27 06	:	:	:	10 00	:	I 35
Excise licenses		:	:	:	:	:	:	:	:	:
Absences without leave	:	:	:	:	:	:	:	:	:	:
Special leaves	:	:	:	:	:	:	:	:	:	:
ctc	:	:	:	:	:	:	:	:		
N. Y. State Dairy Commis-										
Totals	\$34,987 13	\$41,327 93	\$51,108 85	\$60,242 07	\$59,689 07	\$55,502 85		\$62,998 97 \$64,910 65	\$68,540 62	\$54,596 44

RECEIPTS AND DISBURSEMENTS OF THE RELIEF FUND—1871-1888—(Continued.)

## Receipts.

· From—	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	Totals.
Met, Fire Department Relief Fund									\$7,340 07
Fines.	\$868 80	\$1,304 55	\$1,966 33	\$1,703 23	\$2,005 84	\$1,839 84	\$2,249 50	\$1,765 80	20,785 16
Donations	:	100 00	:	100 00	258 00	580 00	2,115 00	55r oo	5,438 00
Penalties	525 00	325 00	460 00	400 00	550 00	200 00	177 50	200 00	12,530 10
Oil licenses	31,180 00	31,270 00	32,720 00	35,270 00	36,550 00	37,100 00	39,500 00	39,510 00	575,738 00
Fireworks permits	409 25	440 75	462 75	513 50	583 75	620 50	627 75	880 00	9.290 25
Interest	22,885 58	23,468 IO	20,347 85	24,764 43	20,567 30	20,712 94	21,711 99	23,695 2I	289,717 10
Foreign insurance tax	:	:	:	:	:	:	:	:	112,635 73
Powder licenses	186 00	188 ∞	00 861	00 061	oo 391	172 00	164 co	156 00	4,072 50
Special permits	370 00	366 00	722 00	872 00	806 00	956 00	1,068 co	1,208 00	7,228 00
Chimney fires	305 00	320 00	360 00	325 00	441 So	355 00	300 00	305 00	5,341 50
Fires in street permits	65 00	63 00	29 00	60 50	05 69	68 00	65 50	43 50	741 75
Sales-Seized combustibles	63 25	35 37	:	6 75	:	:	:	:	145 92
Sales-Sample oils	20 00	:	:	:	:	:		:	88 41
Excise licenses	:	:	:	:	18,397 00	62,406 50	94,684 00	78,094 00	253,581 50
Absences without leave	:	:	:	:	∞ 9/1	316 14	462 42	570 74	I,525 30
Special leaves	:	:	:	:	2,081 96	3,621 65	4,098 38	3,828'63	13,630 62
Sales-Condemned horses, etc	:	:	:	:	513 90	3.114 07	2,538 75	1,320 90	7.487 62
N. Y. State Dairy Commission		:	:	:	:	250 00	:	3,762 50	4,312 50
Totals	\$56,907 88	\$57,880 77	\$57,295 93	\$64,205 41	\$83.168 75	\$132,612 64	\$169,762 79	\$155,891 28	\$1,331,630 03

# Disbursements.

For—	1871, 7 Монтня	1872.	1873.	1874.	1875.	1876.	1877.	1878.	.6281	1880.
Premium on city bonds	:	:	:	:	:	:	:	:		
Salaries	\$5,950 45	\$5,950 45 \$12,276 86	:	:	:	:	:	:	:	
Expense account	905 97	1,450 54	\$1,223 09	o/ 695'ı\$	\$1,292 96	\$1,745 23	\$2,106 54	\$2,014 49	\$1,075 23	\$18 2o
Pay of relieved men	:		:	:	:	:	:	2,199 96	96 664'1	928 31
Pensions of retired men	:	:	:	:	:	:	:	0,068 40	8,073 24	12,000 19
Pensions of widows and orphans	:	:	1,819 50	2,625 00	2,736 68	3,344 53	4,220 09	5,800 71	6,329 94	13,339 63
Totals		\$6,856 42 \$13,737 40 \$3,042 59	\$3,042 59	\$4,194 70 \$4,029 64	\$4,029 64	\$5,089 76 \$6,326 63 \$16,083 56 \$17,278 37	\$6,326 63	\$16,083 56	\$17,278 37	\$27,192 63

							-		
For-	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	Totals.
Premium on city bonds							\$2,700 00		\$2,700 00
Salaries	:	:		:	:	:	:	:	18,227 31
Expense account	\$20 00	\$38 50	\$19 25	\$26 85	:	:	73 56	:	13,590 41
Pay of relieved men	858 29	7,432 54	to 682,01	10,427 46	\$9,838 58	\$9,838 58 \$17,636 20	23,134 33	\$28,250 80	113,295 47
Pensions of retired men	21,211 78	23,190 or	24,018 17	44,274 59	55,550 IS	89 856,95	55,755 I9	52,264 38	365,274 39
Pensions of widows and orphans	15,388 r6	17,551 27	20,359 40	23,133 65	25,116 27	28,707 58	30,261 94	34,424 II	235,178 46
Totals	\$37,478 23	\$48,222 32	\$55,195 86	\$77,862 55	\$90,505 00	\$103,302 45	\$111,925 02	\$II4,939 29	\$743,262 43

## Pecahitulation.

	\$1,331,630 03 743,262 43	\$588,367 60	
Necapillulation.	Receipts, June 1, 1871, to December 31, 1888. \$1,331,630 03  Disbursements, June 1, 1871, to December 31, 1888. 743,262 43	Balance on hand. December 31, 1888	

## Receipts and Disbursements of the New York Fire Department Life Insurance Fund—1871–1888.

#### RECEIPTS.

1871	\$5,040 00
1872	7,773 00
1873	8,789 00
1874	6,395 ∞
1875	12,508 00
1876	11,074 00
1877	8,965 00
1878	9,241 00
1879	9,293 00
1880	9,640 00
1881	10,333 47
1882	10,917 34
1883	11,747 15
1884	12,845 59
1885	13,113 93
1886	17,686 53
1887	19,521 07
1888	19,764 79
Total receipts	\$204.647.87
Tetal 1000pts	
Druprepanenten	
THERHOLEMENTE	
DISBURSEMENTS.	## aaa aa
1871	\$5,000 00
1871 1872	6,000 00
1871 1872 1873	6,000 00 9,000 00
1871 1872 1873 1874	6,000 00 9,000 00 5,000 00
1871 1872 1873 1874 1875	6,000 00 9,000 00 5,000 00 14,000 00
1871 1872 1873 1874 1875	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00
1871 1872 1873 1874 1875 1876	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 8,000 00
1871 1872 1873 1874 1875 1876 1877 1878	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 3,000 00
1871 1872 1873 1874 1875 1876 1877 1878	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 8,000 00 9,000 00
1871 1872 1873 1874 1875 1876 1877 1878 1879	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 3,000 00 9,000 00 12,000 00
1871 1872 1873 1874 1875 1876 1877 1878 1879 1880	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 3,000 00 9,000 00 12,000 00
1871       1872       1873       1874       1875       1876       1877       1878       1879       1880       1881       1882	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 3,000 00 9,000 00 12,000 00 15,000 00
1871       1872       1873       1874       1875       1876       1877       1878       1879       1880       1881       1882       1883	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 8,000 00 9,000 00 12,000 00 15,000 00 9,000 00
1871       1872       1873       1874       1875       1876       1877       1878       1879       1880       1881       1882	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 3,000 00 9,000 00 12,000 00 15,000 00
1871       1872       1873       1874       1875       1876       1877       1878       1879       1880       1881       1882       1883       1884	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 3,000 00 9,000 00 12,000 00 15,000 00 13,000 00
1871       1872       1873       1874       1875       1876       1877       1878       1879       1880       1881       1882       1883       1884       1885       1886	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 8,000 00 9,000 00 12,000 00 15,000 00 13,000 00 13,000 00
1871       1872       1873       1874       1875       1876       1877       1878       1879       1880       1881       1882       1883       1884       1885	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 8,000 00 9,000 00 12,000 00 15,000 00 15,000 00 13,000 00 19,000 00 17,000 00
1871         1872         1873         1874         1875         1876         1877         1878         1879         1880         1881         1882         1883         1884         1885         1886         1887         1888	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 8,000 00 9,000 00 12,000 00 15,000 00 15,000 00 13,000 00 19,000 00 17,000 00 20,000 00
1871         1872         1873         1874         1875         1876         1877         1878         1879         1880         1881         1882         1883         1884         1885         1886         1887	6,000 00 9,000 00 5,000 00 14,000 00 8,000 00 8,000 00 9,000 00 12,000 00 15,000 00 15,000 00 13,000 00 19,000 00 17,000 00 20,000 00

#### NEW YORK FIRE DEPARTMENT LIFE INSURANCE FUND.

	, ————————————————————————————————————		
Dec. 31, 1887	Balance on hand		\$2,883 08
Dec. 31, 1888	Receipts:		
	For assessments	\$19,759 00	
	For interest on deposits	5 79	
			19,764 79
Dec. 31, 1888	Disbursements:		\$22,647 87
	To administratrix of James McManus, No. 1	\$1,000 00	
	" widow of John Timon"	1,000 00	
	" administrator of John H. McKniff	1,000 00	
	" Thomas A. Hopkins	1,000 00	
	" widow of Charles M. Moore	1,000 00	
	" " Thomas Walker	1,000 00	
	" " Joseph Wiedman	1,000 00	
	" administrator of John Brown	1,000 00	
	" widow of Robert Williams	1,000 00	
	" executrix of James Meehan	1,000 00	
	" administratrix of Michael J. Flynn	1,000 00	
	" widow of Edward W. Wilhelm	1,000 00	
	" administrator of Joseph F. Manning	1,000 00	
	" executor of Thomas C. Lee	1,000 00	
	" widow of Michael J. Nolan	1,000 00	
	" administrator of W. W. Rhodes	1,000 00	
	" administratrix of William J. Kerneghan	1,000 CO	
	" John F. Beechinor	1,000 00	
	" widow of James A. Dougan	1,000 00	
	" " Albert Stilwell	1,000 00	
	" " Joseph Saunders	1,000 00	
			21,000 00
Dec. 31, 1888	Balance		\$1,647 87

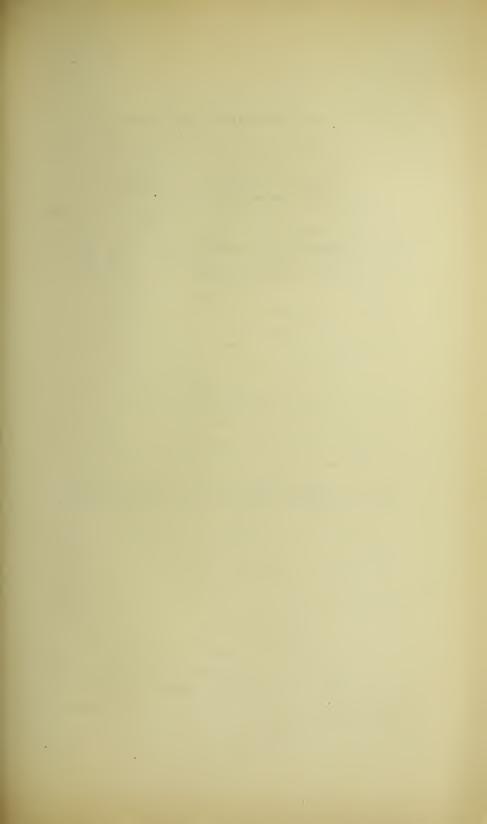
Very respectfully,

HENRY D. PURROY, RICHARD CROKER, FITZ-JOHN PORTER,

CARL JUSSEN,

Secretary.

Commissioners.





## REPORT

OF THE

## FIRE DEPARTMENT

OF THE

## CITY OF NEW YORK

For the Three Months and Year ending December 31, 1889.

NEW YORK:
MARTIN B. BROWN, PRINTER AND STATIONER,
Nos. 49 and 51 Park Place.

1890.



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## HEADQUARTERS FIRE DEPARTMENT, NOS. 157 AND 159 EAST SIXTY-SEVENTH STREET, OFFICE BOARD OF COMMISSIONERS, NEW YORK, March 15, 1890.

To the Hon. Hugh J. Grant,

Mayor of New York:

SIR—We have the honor to submit herewith the report of the operations and actions of this Department for the quarter ending December 31, 1889, and for the year ending on the same date.

Appointments of Fire Commissioners were made on May 2, 1889, as follows:

Commissioner Henry D. Purroy as Fire Commissioner, to succeed Commissioner Fitz John Porter, term expired.

S. Howland Robbins as Fire Commissioner, to succeed Commissioner Richard Croker, appointed City Chamberlain.

Anthony Eickhoff as Fire Commissioner, to succeed Henry D. Purroy, resigned.

Commissioner Eickhoff was elected Treasurer of the Board.

### Appointment of Committees.

Commissioner Robbins was appointed Chairman of the Committee on Telegraph and Supplies.

Commissioner Eickhoff was appointed Chairman of the Committee on Buildings and Apparatus.

The President is ex-officio member of both committees.

Number of each Grade of Officers and Employees on December 31.
Headquarters—
Commissioners 3
Secretary and Assistant Secretary 2
Medical Officers
Bookkeepers and Clerks
Typewriter and Stenographer
Janitor I
Elevator Attendant 1
Watchman 2
Machinist (Acting Engineer)
Stokers
Scrub Women 2
<del></del> 28
Bureau of Chief of Department—
In Active Service—Uniformed Force—
Chief of Department
Deputy Chiefs of Department 2
Chiefs of Battalion
Foremen
Assistant Foremen
Engineers of Steamers
( First Grade 565
Firemen Second Grade 85
Third Grade 28
— 678
—— I,002
Ununiformed Force—
Ununiformed Firemen (on probation) 25
Pilots, Marine \ 4
Engineers, Engines \ 2
Stokers, ) 43 and 51 ) 6
<del></del> 37
Total active service 1,039

Bureau of Chief of Department—(Continued)—	
Relieved from Service at Fires—	
Uniformed Force—	
Chief of Battalion 1	
Foremen 8	
Assistant Foremen 5	
Engineers of Steamers	
Firemen	
Firemen, First Grade 24	
Private I	
<del></del> 55	
	1,094
Bureau of Inspector of Combustibles—	
Inspector of Combustibles	
Clerks 2	
Surveyor	
Oil Collectors to	)
_	10
Bureau of Fire Marshal—	
Fire Marshal 1	
Assistant to Fire Marshal	
Clerks	
	. 5
	J
Bureau of Inspection of Buildings—	
Superintendent of Buildings	
Deputy Superintendents of Buildings 2	
Clerks	
Inspectors of Buildings 40	)
Machinists to Supervise Elevators 4	
Messengers 3	
Driver I	
	74
Attorney to the Department	I

Fire-alarm Telegraph—		
Superintendent of Telegraph	I	
Chief Operator	I	
Operators	4	
Assistant Operators	5	
Clerk	I	
Inspectors of Alarm Boxes	2	
Batteryman and Assistant Batterymen	3	
Foreman	I	
Lineman	I	
Instrument Maker	I	
Machinist	I	
		27
Repair Shops—		
Superintendent of Repairs to Buildings	I	
Foreman	I	
Storekeeper	I	
Clerks	2	
Shop Engineer	I	
Machinists	19	
Machinists' Helpers	5	
Boiler-maker	I	
Blacksmiths	7	
Blacksmiths' Helpers	4	
Wheelwrights	6	
Wheelwrights' Helper	I	
Harness-makers	2	
Hose Repairers	2	
Painters	5	
Watchmen	2	
Drivers	5	
Janitor	I	
Hospital Stables—		66
Stablemen		
		5
Aggregate		1,310

Number of Changes by Resignation, Discharge, Death, Promotion, Appointment, etc., in each Grade.

					Lo	ss By						Ga n	By	ires.
Grade.	Expiration of Term.	Resignation.	Discharge.	Dismissal.	Retirement.	Promotion.	Death.	Dropped.	Appointment.	Total.	Appointment,	Promotion.	Total.	Relieved From Service at Fires.
Commissioners	1	1							ı	3	3		3	
Assistant Secretary		1								1	ı		r	
Clerks		4								4	ı	2	3	
Chief of Department					r					1		r	I	
Assistant Chief of De- partment						1				1				
Deputy Chief of Depart-											I	1	2	
Chief of Battalion						r				r		1	1	
Foremen						1				r		6	6	2
Assistant Foremen		ı				6	2			9		15	15	r
Engineers of Steamer												7	7	
Firemen First Grade		7		2		19	6			34		40	40	2
" Second "				2		41	ı			44		83	83	
" Third "	l	3		2		86	1		1	92	11	.,	11	
Ununiformed Firemen									11	11	33		33	
Oil Surveyor							1			1				
Oil Collector				•		••						••	•••	
Superintendent of Build-			••	••	)	••					2		2	
First Deputy Superin- tendent of Buildings		ĭ		••		•••		••		1	•••	1	1	
second Deputy Superin-)	••	••		••	••	1	••			1	••	ı	1	••
Second Deputy Superin- tendent of Buildings	••	••	••	••	•••	1			••	1	1	••	1	••
Inspectors of Buildings Machinists to Supervise)		3	••	3	••	••	1	••	••	7	2	••	2	••
Elevators	••	•• (	••	••	••	••	1	••		r	1	••	1	
Assistant Batteryman		• •	••						••		1		1	
Lineman		••									5		5	
Instrument maker											1		I	
Machinists								2		2	3		3	
Blacksmiths' Helpers			ſ							I	. 2		2	
Wheelwright											1		1	
Painters		r				r				2	r		r	

					C	n Fires.								
Grade.	Expiration of Term.	Resignation.	Discharge.	Dismissal.	Retirement.	Promotion.	Death.	Dropped.	Appointment.	Total.	Appointment.	Promotion.	Total.	Relieved From Service at F
Harness-makers' Helper							1			1				
Foreman of Stablemen							1			1				
Elevator Attendant						I				1	1		ı	
Stokers		1					1			2	2		2	
Total		23	1	9		159	16	3	13	225	73	158	231	5

## Appropriations (including Transfers) and Expenditures.

Title of Appropriation.	AMOUNT OF APPROPRIATION.	Expenditures.	Balance.
For Salaries—			
Headquarters	\$50,400 50	\$50,c07 13	\$393 37
Bureau Chief of Department	1,345,100 00	1,338,269 38	6,830 62
" Inspector of Combustibles	13,200 00	12,779 10	420 84
" F.re Marshal	7,400 00	7,400 00	
" Inspection of Bu Idings	100,800 00	99,419 13	1,380 87
Attorney	4,000 00	4,000 00	
Fire-alarm Telegraph	26,945 00	26,514 99	430 01
Repair Shops	61,878 00	61,866 40	11 60
Hospital Stables	5,150 00	5,0-9 36	80 64
Total salaries	\$1,614,873 50	\$1 605,325 55	\$9,547 95
For Apparatus, Supplies, etc	\$335,000 00	\$335,000 00	
For new houses for Hook and Ladder Co. No. 14 and in West Eighty-third street	69,750 85	69,750 85	
For placing fire-alarm electrical conductors under-	52,500 00	52,341 82	\$158 18
For New Floating Engine	63,918 65	61,418 65	2,500 00
Toʻal apparatus, etc	\$521,169 50	\$518,511 32	\$2,658 18
Grand total	\$2,136,043 00	\$2,123,836 87	\$12,206 13

Of the expenditures, the following amounts were under contracts, awarded upon proposals advertised for as provided by law:

Apparatus, Supplies, etc.—	
For forage	\$32,495 00
For fuel	21,835 00
For new fire-engines	12,375 00
For new hose	30,000 00
For new hose wagons	1,200 00
For repairing fire-engines	9,400 00
For repairing fire-boat "Zophar Mills"	8,000 00
For chartering steamboat "John Fuller"	11,700 00
For new tenders	3,460 00
Total	\$130,465 00
For placing fire-alarm telegraph electrical con-	
ductors underground	39,101 15
For new houses in West Thirty-sixth street, West	
One Hundred and Thirteenth street and Hos-	
pital and Training Stables	66,387 00
For new floating engine	58,450 00
Grand total	\$294.403 15
	=======================================
Amount of Bills and Pay-rolls Audit	ted.
Bills for 1886	\$257 50
'' 1887	644 39
" 1888	124,933 04
·· 1889	
Total bills	\$473,560 46
Pay-rolls for 1889	1,605,325 54
Total bills and pay-rolls	\$2,078,886 01

#### BUREAU CHIEF OF DEPARTMENT.

Company Organization, Complement of Officers and Men, Kind and Number of Apparatus, and Number of Horses, Number of Alarms Responded to, etc.

	1	en.		Appai	RATUS.			to.	d at.	
Company.		No. of Officers and Men.	No. of Steam Fire Engines, (2 horses each.)	No. of Four- wheel Tenders. (2 horses each.)	No. of Two- wheel Tenders. (1 horse each.)	No. of Hook and Ladder Trucks (3 horses each.)	Total No. of Horses.	No. of Alarms Responded to.	No. of Fires Performed Duty at.	Remarks.
Engine	1	12	1	ı			5	158	60	Engine, 3 horses.
"	2	12	I		ı		3	92	40	4
"	3	12	ı	ı			4	85	35	
"	4	12	ı		1		3	117	56	
66	5	20	2	1	I	}	7	116	42	Double company.
66	6	12	ı		I		3	92	39	
"	7•••••	16	ı		1	*1	5	133	41	* Water Tower, a horses.
"	8	12	ı	I			4	115	30	
"	9	12	ı	ı	,		4	145	51	Engine, 3 horses.
"	10	12	ı	I			4	48	17	
"	11	12	ı	1			4	134	41	
66	12	20	2		2		6	146	53	Double company.
66	13	20	2		2		6	142	42	Double company.
66	14	12	ı	I			5	149	81	Engine, 3 horses.
"	15	12	ı	ı			4	163	41	
"	16	20	2	ı	1		7	120	44	Double company.
"	17	12	1		1		3	213	82	
4.6	18	20	2	1	1		7	146	41	Double company.
"	19	12	ı	ı			4	117	40	
"	20	12	ı		ı		3	153	39	
"	21	12	ı	1			4	113	43	
"	22	12	ı	ı			4	104	26	
66	23	12	ı	1			4	122	48	
"	24	12	I	I			4	102	38	
"	25	12	ı		ı		3	114	23	

		Men.		Арра	RATUS.			rms Responded to.	ormed Duty at.				
		No. of Officers and Mcn	ines.	of Four- wheel Tenders, horses each.)	of Two- wheel Tenders, horse each.)	nd icks. h.)	Total No. of Horses.	puod	No. of Fires Performed Duty				
	COMPANY.	cers	am Eng	Ten's	Tence each	ok an Tru eac	of H	rms Res	es Pe	REMARKS.			
		r Offi	o. of Steam Fire Engines. (2 horses each.)	o. of Four- wheel Tender (2 horses each.	wheel Tende v horse each.	o. of Hook and Ladder Trucks.	No.	f Ala	f Fire	,			
		To. of	No. of Steam Fire En (2 horses ea	No. of Four- wheel Te (2 horses ea	No. of Two- wheel T	No. of Hook and Ladder Truc (3 horses each.)	otal	No. of Alarms Resp	0.01				
			4					4	<u></u>				
Engin	e 26	20	2	1	ı		7	192	68	Double company.			
"	27	20	2	ı	I		7	85	42	Double company.			
66	28	12	1	I			4	99	17				
66	29	12	1		ı		3	96	46				
6.6	30	12	I	1			4	112	29				
6.6	31	20	2	1	1		5	121	44	Double company.			
	32	12	1		1	,	3	83	45				
6.6	33 · · · · · ·	20	2		2		6	140	56	Double company.			
66	34 · · · · · · · · ·	12	1	1		••	4	115	40				
66	35	12	I	I			4	131	42				
66	36	12	I	I	••		4	108	31	(Training Stable in con-			
66	37 • • • • • • • • • • •	14	1	I	• •		4	57	17	nection with com-			
66	38	12	I	1		ı	6	37	23	One Hose Wagon;			
6.6	39	12	ı	1			4	135	35	( Truck, 2 horses.			
6.6	40	12	ı	1		]	4	62	16				
6.6	41	12	I		ı		3	23	14				
6.6	42	8	I	1			4	26	5				
5.5	43 · · · · · · · ·	12						81	10	Floating Engine.			
66	44	12	I	1			4	129	42				
66	45	8	I	I			4	4	3				
6.6	46	8	I	1			4	14	8				
66	47	12	I	I	••	I	6	35	13	Hook and Ladder Truck, 2 horses.			
6.6	43	12	I	1		1	6	12	3	Hook and Ladder Truck, 2 horses.			
6.6	49 · · · · · · · ·	12	I		1	1	5	3	2	Hook and Ladder Truck, 2 horses.			
66	50	12	I	1		I	. 6	30	14	Hook and Ladder Truck, 2 horses.			
66	51	12		••	••		••	91	13	Floating Engine.			
6 6	52	12	I	ı	••	1	6	5	1	Hook and Ladder Truck, 2 horses.			
6.6	53	12	1	1			4	109	35				
66	54 · · · · · · · ·	12	1	1			4	22	5				
	55	12	I		1		3	67	27				
									-				

Company.		No. of Officers and Men.	No. of Steam Fire Engines. (2 horses each.)	No. of Four- wheel Tenders. (2 horses each.)	No. of Two- wheel Tenders.	No. of Hook and Ladder Trucks.	Total No. of Horses.	No. of Alarms Responded to.	No. of Fires Performed Duty at.	Remarks.
Engine 56		12					4	12	7	Organized July 13.
Hook and Lac	- 1									Organized July 13.
Hook and Lac		12		••	••	I	3	197	140	
"	2	12		••	••	I	3	260	90	1 † Water Tower, 2
"	3	12		••	••	†2	5	206	121	horses.
"	4	12		••	• •	I	3	258	155	12 horses each, double
"	5	18		••	••	2	4	171	96	company.
	6	12		••	••	1	3	214	124	
44	7	12	••	••	••	I	2	207	112	
**	8	12		••	••	I	3	176	93	
"	9	12		••	••	I	3	189	103	
44	10	12	)	••	••	I	3	154	122	
44	11	12		••	••	τ	2	167	95	
44	12	12		••	••	1	3	253	138	
44	13	12		••	••	1	2	179	90	
"	14	12	)		••	ı	3	146	93	
"	15	12			••	I	2	83	59	
66	16	12				ı	3	175	86	
44	17	12				ı	2	72	32	
**	τ8	12		,		ı	3	236	143	( t + Hose Wagon and
"	19	8		‡1		ı	4	20	17	# 1 Hose Wagon and H. & L. Truck, 2 horses each.
**	20	12			••	I	2	92	50	Organized April 1.
Total		980	63	§ <sub>3</sub> 8	24	27	299			

§ Includes 1 Hose Wagon. || Includes 2 Water Towers.

Average number of alarms responded to by each company, 116; average number of fires at which each company performed duty, 50.

The companies are organized into twelve battalions, consisting of from five to nine companies each and commanded by a Chief of Battalion; a Deputy Chief of Department commands the Frst, Second, Third, Fourth, Fifth and Sixth Battalions,

and a Deputy Chief of Department commands the Seventh, Eighth, Ninth, Tenth, Eleventh and Twelfth Battalions; the entire force is commanded by the Chief of Department.

Additions and Amendments, etc., to the Rules and Regulations.

MAY 29.

(General Orders No. 4.)

I.—Deputy Chief of Department John McCabe is assigned to the district lying on and north of Twenty-third street, with headquarters at No. 165 West Twenty-ninth street, and will command the Seventh, Eighth, Ninth, Tenth, Eleventh and Twelfth Battalions, and have entire control of the working force at fires within that district, except when the Chief of Department is present.

II.—Deputy Chief of Department Francis J. Reilly is assigned to the district lying south of Twenty-third street, with headquarters at Nos. 155 and 157 Mercer street, and will command the First, Second, Third, Fourth, Fifth and Sixth Battalions, and have entire control of the working forces at fires within that district, except when the Chief of Department is present.

III.—At the expiration of a period of three months, commencing on receipt of this order, they will each exchange commands and headquarters, without transfer of public property of any kind, and so continuing each quarter, each one performing the duty of the other while so located.

IV.—Executive duties, during the absence of the Chief of Department, will be performed by the Deputy Chief of Department whose headquarters are at Nos. 155 and 157 Mercer street at the time of absence, of which he will receive notice, but he will be responsible only for his own district, unless the associate Deputy Chief of Department and the Chief of Department are both absent, in which case he will be responsible for the entire force.

V.—The duties of instructor at the School of Instruction will be performed by the Deputy Chief of Department whose headquarters are at No. 165 West Twenty-ninth street at the time instruction is in progress.

VI.—During the existence of fires requiring the presence of the Chief Officers, the remaining Deputy will, in addition to his own district, respond to second and third alarms for fires within the district made vacant by the absence of the Chief Officers at fires elsewhere.

VII.—It is made the duty of the Deputy Chiefs of Department to make occasional inspections of the battalions in their respective districts, in company with the Chief of Battalion; inspect, stamp and condemn uniforms, make a thorough inspection of quarters, apparatus, horses, tools, etc., and see that all laws, ordinances and rules and regulations relating to the sale and storage of combustibles, explosives, fireworks, etc., obstructions to fire-hydrants, fire-escapes, aisles in theatres, etc., are strictly complied with, and such other duties as are now or may hereafter be prescribed.

VIII.—The Deputy Chief of Department assigned to the first or lower district will perform duty on the first alarm at all stations on and within the following boundary: Worth street, West Broadway, South Fifth avenue, Fifth avenue, Fourteenth street, Third avenue, Bowery, Canal, Walker and Centre streets. On second and third alarms all south of Twenty-third street.

The Deputy Chief of Department assigned to the second or upper district will perform duty on the first alarm at all stations on and within the following boundary: Twenty-third street, Eighth avenue, Forty-second street and Fourth avenue, and elsewhere at his discretion. On second and third alarms all north of Twenty-third street.

#### (General Orders No. 5)

I.—Hereafter three fuel wagons will respond at each third alarm of fire, and Company Commanders are hereby directed to instruct members of their commands, acting as drivers, to proceed immediately and without orders, on their arrival at fires, for the nearest fuel wagon (unless otherwise ordered) in the following manner: The first company due on first alarm will procure the nearest wagon, the first company on second alarm the next nearest, and the first company on third alarm the next nearest; except between Twenty-third and Seventy-second streets (where the fuel wagon from the quarters of Hook and Ladder Company No. 2 responds) and at stations within that boundary the companies due first on third alarm will be relieved from that duty, unless otherwise ordered.

II.—The fuel depots, for convenience, will be renumbered as follows, and the Foreman in charge of Repair Shops will cause the wagons to be marked according to the new numbers:

Fuel Depot No. 1, at No. 28 Beaver street, capacity 40 tons. Coal and wagon on first floor.

No. 2, at No. 5 Duane street, capacity 45 tons. Coal and wagon on first floor.

No. 3, at No. 304 Washington street, capacity 25 tons. Coal and wagon on first floor.

No. 4, at No. 180 Clinton street, capacity 20 tons. Coal and wagon on first floor.

No. 5, at No. 199 Chrystie street, capacity 100 tons. Coal and two wagons on first floor.

No. 6, at No. 253 Spring street (quarters Engine Company No. 30), capacity 10 tons. Coal on first floor, no wagon.

No. 7, at No. 78 Morton street (quarters Engine Company No. 24), capacity 25 tons. Coal and wagon on first floor of rear building.

No. 8, at No. 132 West Tenth street (quarters Engine Company No. 18), capacity 10 tons. Coal in cellar, no wagon.

No. 9, at No. 106 East Thirteenth street (quarters Hook and Ladder Company No. 3), capacity 18 tons. Coal in cellar, wagon at quarters Engine Company No. 28, No. 604 East Eleventh street.

No. 10, at No. 417 West Seventeenth street (quarters Engine Company No. 3), capacity 15 tons. Coal in cellar, wagon on first floor.

No. 11, at No. 355 West Twenty-fifth street (quarters Engine Company No. 19), capacity 20 tons. Coal in cellar, wagon on first floor.

No. 12, at No. 160 East Thirty-third street (Supply Depot), capacity 12 tons. Coal and wagon on first floor.

No. 13, at No. 530 West Forty-third street (quarters Engine Company No. 2), capacity 25 tons. Coal and wagon on first floor of rear building.

No. 14, at No. 126 East Fiftieth street (quarters Hook and Ladder Company No. 2), capacity, 15 tons. Coal and wagon on first floor. Wagon attends on second alarm all fires between Twenty-third and Seventy-second streets.

No. 15, at No. 159 East Eighty-fifth street (quarters Engine Company No. 22), capacity 15 tons. Coal and wagon on first floor.

No. 16, at No. 175 East One Hundred and Fourth street (quarters Engine Company No. 53), capacity 6 tons. Coal in cellar and wagon on first floor.

No. 17, at No. 209 East One Hundred and Twenty-second street (quarters Engine Company No. 35), capacity 8 tons. Coal in yard in rear, wagon at No. 223 East One Hundred and Nineteenth street.

No. 18, at One Hundred and Forty-third street, near Third avenue (quarters Hook and Ladder Company No. 17), capacity 10 tons. Coal in cellar and wagon on first floor.

No. 19, at One Hundred and Sixty-sixth street, between Washington and Third avenues (quarters Engine Company No. 50), capacity 10 tons. Coal in cellar, no wagon.

III.—Members of the Department using fuel wagons must return them to the depots, and leave them ready for immediate use thereafter. They will also report any accident or injury occurring to the wagons to their commanding officers, and he to the officer responsible for the wagon, without delay.

IV.—Company commanders will forward special reports of the effect of inferior fuel when used at fires, on the steaming of the boilers, and state from what depot it was taken.

JUNE 5.

(General Orders No. 6.)

I.—Hereafter, when notified, Chiefs of Battalions will cause a test to be made by companies of such hose in use by them as they may receive notice to test, in the following manner:

The test will be made in front of company quarters, at pressure, and all hose standing the designated pressure will be retained and continued in use. The Captain in charge of Repair Shops will be notified, in writing, of the number of lengths of hose burst at and under the designated pressure, and he will collect and give a receipt for all such, which will answer as a voucher for the hose taken.

Only one company at a time in each battalion will be permitted to test their hose, and chiefs of adjoining battalions will see that companies adjoining each other do not test at the same time.

II.—Companies must not consider themselves out of service while testing, and will not so report.

June 6.

(General Orders No. 7.)

I.—Assistant Foreman John Leonard of Engine Company No. 36, and Engineer of Steamer James Rogers of Engine Company No. 24, are detailed as Supervisory Engineers, and will attend all fires for which third alarms are sent out, as fol-

lows: Assistant Foreman Leonard for the district on and north of Fifty-ninth street, and Engineer Rogers for the district south of Fifty-ninth street. They will supervise the working of all engines at fires, and give the Engineers in charge of engines such instructions as they may deem necessary for the proper handling, as well as for the best delivery of water.

They will report to the Commanding Officer at fires for such special instructions as he may desire to issue. On the following day they will report in writing any neglect on the part of Engineers, defects in pumps, machinery or boilers, defective water supply or inferior fuel.

Cannel coal of the purest grade will not clinker on grate bars, when used in furnace of boiler, and they will make special mention in their reports of all cases where the coal is found to clinker when used at fires, stating to what extent and its effect on the steaming of the boiler.

JUNE 13.

(General Orders No. 8.)

I.—The following instructions, relative to the manner of using the sliding poles, will be strictly adhered to, and Company Commanders are directed to see that the officers and members comply with them, and thereby prevent accidents in the future.

II.—In descending, both hands will be used in firmly grasping the pole over the head. The legs will be folded around the pole in a secure manner, and the body will be permitted to descend only at a moderate rate of speed. On the feet reaching a distance within about four feet of the floor, a still slower rate of speed must be taken. The feet must be in a position to permit the ball of the foot to first strike the floor very lightly, and the weight of the body while making the descent must, in all cases, be held by the hands, aided by the legs around the pole.

Any violation of these rules will be considered a disobedience of orders, and will be so reported.

Hereafter, the above rule will be made a part of the instruction, and all probationary candidates and others will be instructed as the above rules prescribe.

JUNE 21.

(General Orders No. 10.)

I.—The Board of Commissioners having organized Engine Company No. 56, located it at No. 120 West Eighty-third street, and assigned it to the Tenth Battalion, to take effect at 8 o'clock A. M., on the 13th proximo, the following additions and alterations to General Orders No. 17, series of 1887, from this office, are made, to take effect at that time, and the orders on file will be altered to read accordingly:

Engine Company No. 56 is assigned to duty on the first alarm, at Stations 572, 581, 582, 594, 612, 613, 614, 615, 616, 621, 622, 623, 624, 631, 632, 641, 642, 643, 651, 652, 653, 654, 655, 661, 662, 663, 671, 672, 673, 674, 681, 682, 683, 684, 712, 713, 714, 715, 721, 722 and 731.

On the second alarm at Stations 571, 583, 584, 596, 625; 633, 644, 645, 646, 655, 656, 657, 658, 659, 664, 665, 667, 668, 669, 675, 676, 677, 678, 679, 685, 686, 688, 698, 716, 717, 719, 723, 724, 725, 726, 727, 728, 732, 733, 734, 741, 742, 743, 746, 747, 751, 752, 753, 761, 762, 763, 764, 781, 782, 783, 784 and 785.

On the third alarm at Stations 585, 586, 587, 588, 617, 619, 626, 627, 628, 629, 634, 635, 636, 637, 638, 639, 647, 648, 649, 699, 735, 736, 737, 738, 744, 745, 748, 749, 754, 755, 756, 757, 758, 759, 765, 766, 767, 768, 786, 787, 788, 789, 812, 813, 814, 815, 816, 817, 818, 819, 821, 822, 823, 824, 825, 826, 827, 831, 832, 833, 834, 835, 836, 837, 841, 842, 843, 844, 845, 846, 847, 851, 852, 853, 854, 855, 856, 857, 858, 859, 861, 862, 863, 864, 865, 866, 867, 868, 871, 872, 873, 874, 875, 876, 877, 881, 882, 883, 884, 885, 886, 887, 889, 912, 913, 914, 915, 916, 917, 918 and 919.

And to Special Building Signals 188, 247, 257, 352, 537 and 542.

II.—Engine Company No. 1 is relieved from duty on the third alarm at Station 571.

Engine Company No. 2 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Stations 612, 613 and 614.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 624, 641, 642 and 651.

Relieved from duty on the third alarm at Stations 643 and 653.

Engine Company No. 8 is relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 571, 582, 613, 615, 625, 633, 656, 665, 667, 668 and 669.

Relieved from duty on the third alarm at Stations 594, 725, 726, 738, 747, 748, 749, 766, 767 and 768.

Engine Company No. 19 is relieved from duty on the third alarm at Stations 614 and 616.

Engine Company No. 22 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Stations 643, 651, 652, 653, 661, 662, 663 and 671.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 583, 712, 714, 715, 732, 743, 761, 762, 763 and 764.

Relieved from duty on the third alarm at Stations 613, 623, 818, 819, 826, 827, 828, 837, 841, 842, 843, 844, 845, 846, 847, 851, 852, 853, 854, 855, 856, 857, 858, 859, 861, 862, 863, 864, 865, 866, 867, 868, 871, 872, 873, 874, 875, 876, 877, 881, 882, 883, 884, 885, 886, 887, 889, 912, 913, 914, 915, 916, 917, 918 and 919.

Engine Company No. 23 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Stations 641 and 642.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 625, 655, 682 and 698.

Relieved from duty on the third alarm at Stations 596, 644, 645, 646, 647, 648, 649, 656, 657, 658, 659, 664, 665, 667, 668, 669, 675, 677, 679, 685, 687 and 716.

And from Special Building Signal 537.

Engine Company No. 26 is relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 581 and 623.

Relieved from duty on the third alarm at Stations 583, 584, 617 and 654.

Engine Company No. 34 is relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 572, 612 and 614.

Relieved from duty on the third alarm at Stations 621, 622, 631, 632, 641 and 642.

Engine Company No. 35 is relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 646 and 672.

Engine Company No. 36 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Station 731.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 664, 675, 677, 678, 679, 681, 683, 684, 688 and 713.

Relieved from duty on the third alarm at Station 655.

Engine Company No. 37 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Stations 672 and 681.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 661, 685, 686, 717, 719, 727 and 728.

Relieved from duty on the third alarm at Stations 651, 662 and 676.

Engine Company No. 38 is relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 699, 721, 723, 733, 734 and 746.

Relieved from duty on the third alarm at Stations 683, 715, 727, 728, 736, 737, 755, 756, 757, 758 and 759.

Engine Company No. 39 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Station 616.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 631, 632, 654 and 676.

Relieved from duty on the third alarm at Stations 652, 661, 671, 673, 674, 682, 684, 696, 754 and 765.

Engine Company No. 40 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Station 654.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 722, 731, 741, 742, 751, 752, 781, 782, 783, 784 and 785.

Relieved from duty on the third alarm at Stations 678, 686, 688, 689, 699, 717, 718, 719, 724, 733, 734, 735, 746, 764, 788, 789, 817, 821, 822, 823, 824 and 825.

Engine Company No. 44 is relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 594, 621, 622, 663, 671, 673, 674, 716, 724, 725, 726 and 747.

Relieved from duty on the third alarm at Stations 581, 624, 681, 712, 713, 714, 721, 722, 723, 731, 732, 733, 741, 742, 743, 744, 745, 751, 752, 753, 761, 762, 763, 781, 782, 783, 784, 785, 786 and 787.

Engine Company No. 47 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Stations 621, 622, 624, 631 and 632.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 596, 616, 644, 645, 657, 658 and 659.

Relieved from duty on the third alarm at Stations 572, 582, 615, 636, 637, 638 and 639, and from Special Building Signal 247.

Engine Company No. 51 (Fire-boat "Zophar Mills") is assigned to duty on the second alarm at all stations on the East

river, on and south of Fourteenth street, at which Engine Company No. 43 (Fire-boat "William F. Havemeyer") responds on the first alarm.

Engine Company No. 53 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Stations 655, 673, 674, 682, 683, 684, 712, 713, 714, 715, 721 and 722.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 652, 662 and 753.

Relieved from duty on the third alarm at Stations 812, 813, 814, 815, 816, 831, 832, 833, 834, 835, 836, 837, 841, 842, 843, 844, 845, 846, 847, 851, 852, 853, 854, 855, 856, 857, 858, 859, 861, 862, 863, 864, 865, 866, 867, 868, 871, 872, 873, 874, 875, 876, 877, 881, 882, 883, 884, 885, 886, 887, 889, 912, 913, 914, 915, 916, 917, 918 and 919, and from Special Building Signals 188, 257 and 542.

Engine Company No. 54 is relieved from duty on the first alarm, and will perform duty on the second alarm, at Stations 572, 581, 582, 594, 615 and 623.

Relieved from duty on the second alarm, and will perform duty on the third alarm, at Stations 584, 643 and 653.

Relieved from duty on the third alarm at Stations 585, 586, 587, 588, 619, 625, 626, 627, 628, 629, 633, 634, 635, 663, 672 and 698, and from Special Building Signal 352.

III.—The boundaries of the company districts of Engine Companies Nos. 40, 47 and 56 will be as follows, and the orders on file will be altered to read accordingly:

Engine Company No. 40—Fifty-ninth street, Eighth avenue, Seventy-sixth street to North river.

Engine Company No. 56—Seventy-sixth street, Eighth avenue, Ninety-third street to North river.

Engine Company No. 47— Ninety-third street, Eighth avenue, One Hundred and Tenth street to North river.

IV.—Paragraph IV. of General Orders No. 17, C. of D., 1887, is hereby amended to read so that hereafter when Engine

Companies Nos. 43 and 51 are responding to alarms for fire on either of the islands, they will stop at the pier at the foot of East Twenty-sixth street, for further instructions. Telephone connections exist between all the islands and the Warden's office at Bellevue Hospital, and the commanding officer in charge of a fire on either one of the islands will immediately communicate the particulars and extent of any fire by telephone to the Warden of Bellevue Hospital, at Twenty-sixth street, and the commanding officer of the force of this Department at Twenty-sixth street will either dismiss the companies or send them on to the fire, as the circumstances warrant.

V.—A large double reel-hose tender, equipped with large hose, connections of various kinds and sizes, pipes, etc., has been located at the quarters of Hook and Ladder Company No. 15, and will respond on the first alarm at all stations on and south of Chambers street, at which Engine Companies Nos. 43 and 51 respond, on the first alarm. It can be called to fires elsewhere by making use of the following Special Call Signal: 16 strokes and 3-4 strokes (followed by one round of the station where it is required), which signal is adopted for the purpose, and will be added to General Orders No. 17, C. of D., 1887.

A copy of this order, after the alterations are made, will be attached to the assignment book (G. O. No. 17, C. of D., 1887) for reference in the future.

JUNE 22.

(General Orders No. 11.)

I.—The following instructions relative to fire-hydrants (in addition to those contained in G. O. No. 21, B. of C., 1881) will be adhered to: Company Commanders will make an inspection of all the hydrants in their company districts on the 5th of each month (except when it falls on a Sunday or a holiday), and forward a report to this office on or before the

Ioth of each month, showing the exact location of new hydrants, and also all hydrants which may have been removed and not replaced since the previous report was forwarded. They will also keep a correct record of the number of hydrants in their district, so that this office can keep a correct record of the number of hydrants for the entire city.

II.—Company Commanders will also count the number of hydrants, and forward a statement of the total number of single and double hydrants, and also the Victor and other patterns. After the regular monthly inspections, they will send notices direct to the officer of the Department of Public Works having charge of the hydrants and water-pipes in that part of the city, showing the location of hydrants requiring repairs, and stating the nature of the repairs required. If, after a reasonable time, the repairs have not been made, a report containing the same information will be forwarded to this office.

III.—Portable hydrant nipples will be used on hydrants in all cases where the threads on nipples are loose or broken, or where other defects are found to exist.

JUNE 29.

(General Orders No. 12.)

I.—The following directions as to the manner of responding to alarms for fire hereafter, will be adhered to until otherwise ordered.

For the boundary on and within New Chambers street, from East river to Park Row, Bowery, Fourth avenue, Fourteenth street, Fifth avenue, South Fifth avenue and West Houston street to North river:

# AT ALL SECOND ALARMS.

The Chief of Battalion second due, the Engine Company fourth due where there are four, or the fifth due where there are five, and the Hook and Ladder Company second due, will be relieved from responding (except when specially called) and will cover the ground left vacant, by responding to all alarms to which they are assigned to respond (whether marked on reserve or not) on either the first, the second or the third alarm, while the companies are on duty at fires elsewhere.

### AT ALL THIRD ALARMS.

The Chief of Battalion second due, the Engine Company fourth due where there are four, or the fifth due where there are five, will be relieved from responding (except when specially called) and will cover the ground left vacant, by responding to all alarms to which they are assigned to respond (whether marked on reserve or not) on either the first, the second or the third alarm, while the companies are on duty at fires elsewhere.

Hook and Ladder Co. No. 20 being assigned to first alarm stations only, will be considered as a reserve company when in quarters, and will respond on the first alarm to all stations on and south of Fourteenth street (where there is only one Hook and Ladder Company to respond), while the companies assigned to those stations are on duty at fires elsewhere.

II.—For all other sections of the city, not included in the foregoing boundary, the following instructions will be observed:

#### AT ALL FIRST ALARMS.

The Engine Company third due, where three companies are assigned, will be relieved from responding (except when specially called) and will cover the ground left vacant, by responding to all alarms to which they are assigned to respond (whether marked on reserve or not) on either the first, the second or the third alarm, while the companies are on duty at fires elsewhere.

#### AT ALL SECOND ALARMS.

The Chief of Battalion second due where there are two assigned, the Engine Company third due where there are three, or the fourth due where there are four, and the Hook and

Ladder Company second due where there are two, will be relieved from responding (except when specially called) and will cover the ground left vacant, by responding to all alarms to which they are assigned to respond (whether marked on reserve or not) on either the first, the second or third alarm, while the companies are on duty at fires elsewhere.

#### AT ALL THIRD ALARMS.

The Chief of Battalion second due where there are two assigned, or the one if there is only one assigned, the Engine Company third due where there are three, or the fourth due where there are four, and all of the Hook and Ladder Companies, will be relieved from responding (except when specially called), and will cover the ground left vacant by responding to all alarms to which they are assigned to respond (whether marked on reserve or not) on either the first, the second or the third alarm, while the companies are on duty at fires elsewhere.

Engine Companies Nos. 43 and 51, and also all double companies, are excluded from the provisions of this order, and they will perform duty as heretofore, as it is understood that second sections, in all cases, act as reserve companies, and the reserve companies act in the same manner as second sections of double companies.

These rules will be complied with as directed, if a third alarm is sent out and either the first or second omitted.

III.—Chiefs of Battalion and Company Commanders will not erase their numbers from the stations in the assignment order, but merely mark them in the following manner in red ink (7), (23), (6), (35), to indicate that they are held in reserve, to cover vacant ground, at stations at which they are assigned (whether marked on reserve or not) until relieved.

As the nearest companies (to those held in reserve) return to quarters, the operators will notify the companies held in reserve that they are relieved as reserve companies, and Chiefs of Battalion will notify each other, by telephone, of their return, so that their reserve will be relieved.

To prevent any misunderstanding, the manner in which the assignments are printed in G. O. No. 17, C. of D., 1887, will be taken as a guide, and where corrections have been made companies will be considered as having taken the place of those relieved.

IV.—This order will go into effect at 8 o'clock A. M. on the day following its receipt, and will be substituted for G. O. No. 12, previously issued to take effect July 4, which will be rendered null and void, and all copies returned to this office after this order is in effect.

JULY 9.

(General Orders No. 13.)

I.—Company Commanders are directed, during the months of April and October in each year, to have the cellars of their respective company quarters properly dusted, and given at least two coats of whitewash, and will include all areas, walls, under the stairs, the under part of first floor, the beams, girders, columns and bins. Brushes for this purpose will be furnished in the usual manner, and Chiefs of Battalion will provide all the lime that may be required for their respective companies, to carry out the provisions of this order.

II.—Where floors are in a leaky condition they will not be flooded with water for the purpose of washing, but, in lieu of such process, the mops should be used when necessary.

JULY 11.

(General Orders No. 14.)

I.—The following rules, relating to the manner of invoicing, or of making a report or a return of the hose in use by the Department, the material used and how manufactured, are

hereby promulgated for the information and guidance of the force, and will be adhered to:

#### RUBBER HOSE.

Rubber hose is manufactured from canvas duck and rubber, in plies, in length of 50 feet each, and they are of the following brands:

Maltese Cross L	Weight, about	50	pounds	per length.
Maltese Cross	66	60	"	"
Peerless	"	60	"	66
White Anchor	66	60	"	66
	"		66	66
	"		"	66
	"		"	"

## FABRIC HOSE.

Fabric hose is manufactured from cotton, woven and knit, in plies, multiplies and jackets, all rubber lined, in lengths of 50 feet each, and they are of the following brands:

Eureka, Multiply	Weight, about	55	pounds	per length.
Baker, Ply		50	"	"
Unique, Jacket		50	"	66
American Jacket, Jacket.	. "	50	"	"
Surprise Jacket, Jacket		50	"	66
			"	66
			"	66
	, "		"	"

Blank forms to conform to the provisions of this order will be furnished for hose reports hereafter, when required, and Company Commanders are prohibited from using any other name than the one received by them on invoice, and will account for the hose by lengths only.

II.—The Officer in charge of the Repair Shops will, in delivering new hose, invoice it by the correct name of the

brand, and hose not invoiced will be considered as on test, and at the expiration of each year's service, a special report will be forwarded, giving all the particulars of its merits or demerits while in use by the company.

JULY 16.

(General Orders No. 15.)

I.—The following rules for the government of the fire-boats in obtaining a supply of coal, blowing off and washing out boilers, etc., and the manner of covering stations for the boats, while absent, are promulgated for the information and guidance of the force, and will take effect on receipt of the order.

### FIRE-BOAT "ZOPHAR MILLS"—COALING.

The fire-boat "Zophar Mills" (Engine 51), will, for the purpose of obtaining a supply of coal, leave her berth at 10 o'clock A. M. Sunday of each week, and proceed to the coaling station at Hoboken.

On leaving, a man will be stationed at the signal-box on the dock, who will, upon receipt of a signal???? station at which Engine Co. No. 51 is assigned, at once hoist and display a signal flag 7 feet long and 4 feet wide, with a white ground, blue border, and the letters "Z. M." in red in the centre, from the flagstaff on the dock.

On this signal being observed, they will immediately return to their berth for instructions, or to respond to an alarm for fire at which they are assigned. After their return they will proceed and complete the coaling up.

The time to be consumed in obtaining a supply of coal will be one and one-half hours.

#### BLOWING OFF BOILERS.

The designated days for blowing off, washing out boilers and making slight repairs on the "Zophar Mills" will be as follows:

On the 10th of each month the port boiler, and on the 20th of each month the starboard boiler will be blown off and washed out, and such slight repairs as may be necessary will be made. All of which will be done between the hours of 6 A. M. and 6 P. M.

## FIRE-BOAT "WILLIAM F. HAVEMEYER"—COALING.

II.—The fire-boat "William F. Havemeyer" (Engine 43) will, for the purpose of obtaining a supply of coal, leave her berth at 10 o'clock A. M., every alternate Saturday, commencing on the Saturday following the receipt of this order, and proceed to the coaling station at Hoboken. If, while coaling, the signal flag should be observed on the flagstaff at the berth of Engine 51, at the foot of West Thirteenth street, N. R., they will immediately report at that berth to receive instructions to respond to an alarm for fire, or to locate there and be prepared to respond to all alarms for fire, at which both Engine Companies Nos. 43 and 51 are assigned, until the return of Engine 51, when they will return to the coaling station and complete the coaling of the boat. The time to be consumed in obtaining a supply of coal will be two and one-half hours.

#### BLOWING OFF BOILERS.

The designated day for blowing off, washing out boilers and making slight repairs on the "William F. Havemeyer," will be on the 5th day of each month, when the boilers will be blown off and washed out, and such slight repairs as may be necessary will be made; all of which will be done between the hours of 6 A. M. and 6 P. M.

III.—When either boat goes out of service from any cause, the Commanding Officer will send in the still-alarm signal, and the operator at the Central Office will either transmit that signal to the boat remaining in service, or notify the Commanding Officer by telephone or any other manner, in which case the

boat remaining in service will respond to all signals or stations at which the boat going out of service is assigned, and will continue to so respond until the return to service of that boat, when the operator will again notify the remaining boat of the other's return to service.

IV.—Whenever Engine 43 is at the coaling station and an alarm for fire is received at which Engine 51 responds, they will leave a man on the dock to hoist the signal flag. Engine 43 will then return to the berth of Engine 51 to receive instructions, or to locate there until the return of Engine 51, when they will complete their coaling.

V.—In cases where these rules cannot be complied with, or when extraordinary repairs are required, calling for one of the boats to be laid up for an indefinite period, or for any cause, notice will be immediately sent to the Chief of Department, the Deputy Chiefs and also to the Chief of Battalion in whose battalion the boat is located, stating the objects which call for the boat to be placed out of service, and it will not be placed out of service without the consent of the Chief of Department, except upon extraordinary occurrences, or in case of an accident.

SEPTEMBER 12.

(General Orders No. 16.)

I.—The following resolution, adopted at a meeting of the Board of Commissioners held on the 11th instant, is hereby promulgated for the information and guidance of the force, and will take effect at eight o'clock A. M. on the 15th instant.

Resolved, That, hereafter, any application for leave of absence on account of alleged sickness, for any period exceeding six hours, must be made in writing and be first forwarded to the Chief of Department, and thence be forwarded by the Chief to the proper Medical Officer, with such written reason in favor of or against said application, as to the Chief of Department may seem pertinent; and the Medical Officers shall

not grant any extension of a six hours' leave of absence, until an application for such extension shall have been first forwarded to the Chief's office for the purposes above mentioned.

OCTOBER 3.

(General Orders No. 17.)

I.—Members of the Department are (except in case of actual necessity) strictly prohibited from either mounting or dismounting the apparatuses of the Department from steps in front of wheels while they are in motion.

II.—Members of the Department are strictly prohibited, while performing the duty of policing in or about company quarters, from standing on window-sills, lintels, cornices, or projections of any kind, except when equipped with a life-saving or ladder belt, and held in the same manner as instructed at, and as prescribed by the "School of Instructions," when climbing by pairs. In any case where an accident occurs in or about company quarters resulting in injury, it will be considered a violation of this rule, unless it can be clearly shown that precautionary measures had been taken to avoid accidents.

OCTOBER 4.

(General Orders No. 18.)

I.—Company Commanders will make an inspection of their respective company districts and report all violations of law relating to this Department, that may be found to exist therein, in the manner hereinafter stated.

Attention is called to the provisions of chapter 410, Laws of 1882, as amended by chapter 456, Laws of 1885, and chapter 566, Laws of 1887, and to that part of section 487, as amended by section 15, chapter 566, Laws of 1887, wherein it states: and all shutters on the front window openings above the first story shall be so arranged that they can be readily opened from the outside by the firemen.

On all buildings where the shutters are not so arranged, reports will be forwarded to the Board of Commissioners stating those facts.

Attention is also called to that part of section 489 as amended by section 17, chapter 566, Laws of 1887, wherein it states: All buildings, other than dwelling-houses hereafter erected, and all factories, hotels, churches, theatres, school-houses, and other buildings of a public character now erected, in which gas or steam is used for lighting or heating, shall have the supply pipes leading from the street mains provided each with a stop-cock placed in the sidewalk at or near the curb and so arranged as to allow of shutting off at that point; and electric wires for furnishing light, heat or power, led into any such building from the outside thereof, shall be arranged with suitable appliances to cut off the current on the outside of the building.

Violations of this section, when discovered, will be reported without delay.

Attention is also called to that part of section 494 as amended by section 22, chapter 566, Laws of 1887, wherein it states: The scuttles in all tenement-houses shall have stationary iron ladders leading to the same, and all scuttles and ladders shall be kept so as to be ready for use at all times, and no scuttle shall be less in size than two by three feet. If a bulkhead is used in place of a scuttle, it shall have stairs with sufficient guard or hand-rail leading to the roof; and in case the building shall be a tenement-house, the door in the bulkhead, or any scuttle, shall at no time be locked, but may be fastened on the inside by movable bolts or hooks.

Violations of this section, when discovered, will be reported without delay.

Attention is also called to the entire provisions of section 499, as amended by section 26, chapter 566, Laws of 1887, as shown herein.

## Fire-escapes.

§ 499. (As amended by sec. 26, chapter 566, Laws of 1887.) All dwelling-houses now erected, or that may hereafter be erected, more than two stories in height, occupied or built to be occupied by two or more families on any floor above the first, and all buildings now erected, or that may hereafter be erected, more than four stories in height, occupied by, or built to be occupied by, three or more families, above the first story, and every building already erected, or that may hereafter be erected, more than three stories in height, occupied or used as a hotel, lodging-house or boarding-house, having more than fifteen rooms, and every factory, mill, office building, manufactory or workshop, hospital, asylum, or institution for the care or treatment of individuals, and every building in whole or in part occupied or used as a school or place of instruction, or assembly, shall be provided with such good and sufficient fire-escapes or other means of egress in case of fire as shall be directed by the superintendent of buildings, and said superintendent shall direct such means of egress to be provided in all cases where he shall deem the same necessary. The owner or owners of any building upon which any fire-escapes may now be, or may hereafter be erected, shall keep the same in good repair and well painted, and no person shall at any time place any incumbrance of any kind whatsoever before or upon any fire-escape from any building in said city. It shall be the duty of all firemen, policemen, and every officer of the bureau of inspection of buildings, who shall discover any fire-escape, balcony or ladder of any fire-escape incumbered in any way, to forthwith verbally notify and require the occupant of the premises or apartment to which said fire-escape, balcony or ladder is attached, or for whose use the same is provided, to remove such incumbrance and keep the same clear. If said notice shall not be complied with by the removal of such incumbrances and keeping said fire-escape, balcony or ladder free from incumbrance, then it shall be the duty of said policeman, fireman or officer of the bureau of inspection of buildings, to apply to the nearest police magistrate for a warrant for the arrest of the occupant or occupants of the said premises or apartment of which the fire-escape forms a part, and the said parties shall be brought before the said magistrate, as for a misdemeanor; and, upon conviction, the occupant or occupants of said premises or apartment shall be fined not more than ten dollars for each offense, or may be imprisoned not to exceed ten days, or both, in the discretion of the court.

Halls and Stairs in Buildings Altered or Erected to be Used as Hotels, and as Dwellings over Five Stories in Height or over Sixty Feet in Height, to be Inclosed in Brick Walls. Entrances to Cellar to be provided in Dwelling-houses.

Every building hereafter erected or altered to be occupied as a hotel, and every dwelling-house exceeding five stories in height hereafter erected or altered to be occupied by two or more families on any floor above the first, and every dwellinghouse over sixty feet in height hereafter erected or altered to be occupied by more than one family shall have the halls and stairs inclosed with twelve-inch brick walls. But eight-inch walls, not exceeding fifty feet in their vertical measurement, may inclose said halls and stairs, and be used as bearing walls where the distance between the outside bearing walls does not exceed thirty-three feet, and the area between said brick inclosure walls does not exceed one hundred and eighty superficial feet. The floors, stairs and ceilings in said halls and stairways shall be made wholly of iron, brick, stone or other hard incombustible materials, and at least one flight of such stairs in each of said buildings shall extend to the roof, and be inclosed in a bulkhead built of fire-proof materials. Every dwelling-house arranged for or occupied by two or more families above the first story, hereafter erected, shall be provided with an entrance to the cellar thereof from the outside of such building.

Halls, Doors, Stairways, Seats, Passageways and Aisles in Buildings of Public Character to be Arranged as Directed.

In all buildings of a public character already erected or hereafter to be built in said city, such as hotels, churches, theatres, restaurants, railroad depots, public halls, and other buildings used or intended to be used for purposes of public amusement or instruction, the halls, doors, stairways, seats, passage-ways and aisles shall be arranged as the superintendent of buildings, with the concurrence of the board of fire commissioners, shall direct, to facilitate egress in cases of fire or accident, and to afford the requisite and proper accommodation for the public protection in such cases. All aisles and passageways in said buildings shall be kept free from camp-stools, chairs, sofas and other obstructions, and no person shall be allowed to stand in or occupy any of said aisles or passageways, during any performance, service, exhibition, lecture, concert, ball, or any public assemblage. The superintendent of buildings, with the concurrence of the board of fire commissioners, may at any time serve a written or printed notice upon the owner, lessee or manager of any of said buildings, directing any act or thing to be done or provided in or about the said buildings and the several appliances therewith connected, such as halls, doors, stairs, windows, seats, aisles, fire-walls and fireescapes, so as to afford such security to the public in the uses to which they may be severally applied, as they may deem necessary.

Nothing herein contained shall be construed to authorize or require any other alterations to existing theatres than are specified in this section.

Reports recommending fire-escapes for all buildings prescribed by the above section will be forwarded without delay. The removal of obstructions from fire-escapes will be strictly carried out as prescribed by this section, and reports of removal of obstructions only will be forwarded. II.—The hinged folding iron ladder used in some instances in connection with balcony fire-escapes should be classed as defective, unless the ladder is in such a position that it may be used at any time by the occupants. Where such ladders are found folded against the front of a building and locked, verbal notice will be immediately given to owners or occupants to lower such ladders, and if it is not complied with in a reasonable time, a report of defective fire-escape, giving all the facts, will be forwarded.

III.—Attention is also called to the entire provisions of section 446, chapter 410, Laws of 1882, as shown herein:

Obstructions of Fire-hydrants—Removal of Snow, Ice, etc.

§ 446. No person shall in any manner obstruct the use of any fire-hydrant in said city, or allow any snow or ice to be thrown or piled upon or around the same, or have or place, or allow to be placed, any material in front thereof, from the curb line to the centre of the street, and to within ten feet from either side thereof, and all snow and ice accumulating within such space shall be removed by the owner or owners, lessee or lessees of the premises fronting the same in the same manner as is prescribed for the keeping clear of the sidewalk, under a penalty of ten dollars for each and every such offense; and any and all material found as an obstruction, as aforesaid, may be forthwith removed by the officers or employees of said board, and at the risk, cost and expense of the owner or claimant, and said board may take all proper measures to keep said hydrants from freezing and in proper condition for use at all times.

Verbal notice will be given to parties herein named, or to contractors and others, laying subways, sewers, etc., and if not complied with after a reasonable time has elapsed, reports will be forwarded.

Sections 452, 453, 457, 460, 461, 462 and 463, of chapter 410, Laws of 1882, as shown herein, will be carried out, and a

strict compliance with the provisions of G. O. No. 1, Board of Commissioners, 1889, will be observed.

# Shavings, How Stored Away—Kindling Fires in Streets, etc.— Penalty—Chimney Fires.

§ 452. All carpenters or others in said city making or using shavings shall, at the close of each day, cause the same to be securely stowed in some safe place remote from danger by means of fire, under the penalty of five dollars for each omission so to do. No person shall kindle any fire nor furnish the material nor in any way authorize or allow any fire to be made in any street, road, alley, lane, or upon any pier, wharf, or bulkhead in said city, except under such regulations as shall be established by said board of fire commissioners, under a penalty of ten dollars for each and every such offense. If any chimney, stove-pipe or flue within the said city shall take fire, the occupant of the premises to which such chimney, stove or flue appertains, shall forfeit the sum of five dollars.

# Closing of Hoistways, Trap-doors and Iron Shutters—Liability in Civil Actions for Negligence, etc.

§ 453. All hoistways, well-holes, trap-doors and iron shutters shall be closed at the completion of the business of each day by the occupant of the building having use or control of same, and in case of a violation of this provision, such occupant having the use or control thereof shall forfeit and pay a penalty of fifty dollars for each and every neglect or omission so to do. And for any accident or injury to life and limb, resulting directly or indirectly from any neglect or omission to properly comply with any of the requirements of this section, the person or persons culpable or negligent in respect thereto, shall be liable to pay to any officer, agent or employee of said board injured, or whose life may be lost (resulting from such neglect or omission) while in the discharge or performance of any duty imposed by said board, or to the wife and children, or to the

parents, or to the brothers and sisters, being the surviving heirs at law of any deceased person thus having lost his life, a sum of money in case of injury to person not less than one thousand dollars, and in case of death not less than five thousand dollars. such liability to be determined and such sums recovered in an action to be instituted by said board for and in behalf of any person injured, or the family or relatives of any person killed as aforesaid: and any and all persons for any fire resulting from his or their willful or culpable negligence, or criminal intent or design, shall, in addition to the present provisions of law for the punishment of persons convicted of arson, be liable in a civil action for the payment of any and all damages to the person and property, the result of such fire, and also for the payment of all costs and expenses of said board incurred in and about the use of employees, apparatus and materials, in the extinguishment of any fire resulting from such cause, the amount of such costs and expenses to be fixed by said board. and when collected shall be paid into the relief fund of said department herein created: and shall also be liable for injury to person or loss of life of any officer, agent or employee of said board, in the same manner and like extent and to be sued for in like manner as in the preceding part of this section provided for.

Crude Petroleum and Coal Oils—Warehouses for—Petroleum, Kerosene, etc.—How Tested—Number of Barrels of, above Cellar—Storage in Cellars—Above First Floor, Limited— Carting, Handling and Transporting—Permits for Storage in Fire-proof Buildings, etc.

§ 457. No person shall have, keep upon sale, or store in any place or building within the corporate limits of the city, any crude petroleum, coal, or any similar oil, nor any of their products, either of which shall emit an inflammable vapor at a temperature below one hundred degrees of Fahrenheit, except under the following provisions: or any of their products may

be stored in detached and properly ventilated warehouses, the outer walls of which shall be stone, brick or iron, especially adapted for the purpose, by having raised sills, at least two feet high, or the ground floor of which shall be at least two feet below the level of street or adjoining yard or so constructed as to actually prevent the overflow of such substances beyond the premises where the same may be kept or stored; which said warehouses shall not be occupied in any part as a dwelling; and if less than fifty feet from any adjacent dwelling the same must be separated by a brick or stone wall at least ten feet in height and sixteen inches thick, constructed in such manner as said commissioners may prescribe, but the same may be stored in such other manner as said commissioners may designate under a special permit issued therefor. No refined petroleum, kerosene, coal, or similar oil, or earth or rock oil, or machinery oil, or any product thereof to be used for illuminating or heating purposes which shall emit an inflammable vapor at a temperature below one hundred degrees Fahrenheit, shall be kept upon sale or stored within the corporate limits of the city. All said articles shall be tested and their quality determined by sanitary surveyors authorized by said commissioners, using G. Tagliabue's instruments, or such other instruments as may be designated by said commissioners, the barrels or packages containing the same to be legibly stamped or marked with said inspector's official stamp or mark. No refined petroleum, kerosene, gasoline, naphtha, or benzine, benzole, camphene or burning fluid or products or compounds containing any of said substances, when temporarily placed above the cellar or basement of any building, and in barrels of not over forty-five gallons each, or in metallic vessels or tanks, shall exceed in the whole quantity the contents of fifty of said barrels, provided, however, that the whole quantity of said refined oils that may be so kept or stored, over night, shall not exceed the contents of ten of said barrels, unless stored in the manner provided for storing crude

petroleum; and when stored in cellars or basements, surrounded by walls of brick or stone, and at least two feet below the level or grade of the sidewalk, street, or land adjacent, the whole quantity shall not exceed the contents of one hundred and fifty barrels, unless stored in warehouses specially adapted for that purpose, as required for the storage of crude petroleum under this section; provided, also, that no quantity of said oils greater than one barrel shall be stored or kept in any building occupied in any part thereof as a dwelling. No refined petroleum, kerosene, gasoline, naphtha, benzine, benzole, camphene, burning fluid, or products or compounds containing any of said substances, shall be kept or stored on or above the first story or floor of any building, exceeding in the whole quantity the contents of five barrels, of forty gallons each. In no case shall any of the articles named in this section be allowed to remain on the sidewalk beyond the front line of any building, or in or upon the streets, docks, piers, bulkheads, slips, highways, or public places a longer time than is actually necessary for the removal or loading of the same, and said commissioners may establish and enforce general regulations and issue such orders and special directions relative to the handling, lightering, carting, loading, unloading and transportation of the several articles named under this section, as in their discretion shall be deemed necessary for the public protection, and said commissioners may issue special permits authorizing the keeping of any of the articles enumerated under this section in buildings, tanks, or structures fire-proof throughout, in such quantities, in such manner, and subject to such regulations as shall tend to secure the same against danger.

Fire or Light on Vessels, etc., within 150 Feet of Places where Petroleum is Stored—Exceptions—Penalty.

§ 460. It shall be unlawful for the owner, or for any of the officers, employees, or crew of any ship, vessel, canal-boat, barge, lighter, boat or other craft lying at or within one hundred

and fifty feet of any warehouse, yard, shed, dock, pier, bulkhead, wharf, or other place within the county of New York, at, in, or on which petroleum oil, or any of its products is stored, or kept for export, or in quantities exceeding ten thousand gallons; or for any other person or persons to bring, keep, have, or use, or suffer or permit to be brought, kept, had or used on board of any such ship, vessel, canal boat, barge, lighter, boat, or other craft, or at, in, or on any such warehouse, shed, yard, dock, pier, bulkhead, wharf, or other place, any lighted match, or lighted cigar, cigarette, or pipe, or any fire or light of any kind, without, or otherwise than in strict conformity to the written permission of the owner, lessee or superintendent of such warehouse, shed, yard, dock, pier, bulkhead, wharf, or other place specifying the fire or light to be kept, had or used, the particular purpose for, and the place or spot at which the same may be so kept, had or used, and the particular manner of keeping, having or using the same. This section shall not apply to steam tugs while transacting their ordinary business, nor to steam fire-engines engaged in extinguishing fires. Every violation of this section shall be a misdemeanor, triable before the court of special sessions.

# Regulations in Regard to Chemicals.

§ 461. No quantity of the following-named chemicals and combustible materials greater than is hereinafter enumerated shall be stored or kept in or upon any one building within the city, namely: hemp or flax, unbaled, two thousand pounds in the whole; varnish, rosin, twenty barrels in the whole; alcohol, pure spirits, camphene, burning fluid, five barrels in the whole; unslaked lime, ten barrels; vitriol, five carboys in the whole; loose wood shavings, one hundred pounds; except the same shall be stored and kept upon an open space of ground, surrounded by a wall constructed entirely of fire-proof materials, at least twelve feet high and twelve inches thick; or within a fire-proof building remote or distant at least fifty feet from any adjacent building.

Storing of more than Twenty Tons of Hay, etc., Prohibited, except in Fire-proof Buildings, etc.—Uncovered Hay, etc.—Keeping of.

§ 462. No quantity of cotton, hay, straw, flax, hemp, husks, rushes, oakum, rags, sea-weed, jute or other vegetable fibre when pressed or baled, greater than twenty tons in the whole. shall be stored or kept in any building within the City of New York, unless kept in a building fire-proof throughout, or upon an open space of ground surrounded by a wall constructed entirely of fire-proof materials, at least twelve feet high and twelve inches thick, or within a fire-proof building remote or distant at least fifty feet from any adjacent building, or in a building approved by the New York board of underwriters or the commissioners of the fire department, and of which approval a certificate shall have been issued by either of said boards, and shall not have been revoked; and none of the articles enumerated in this section, when loose or not baled, shall be kept as aforesaid in quantity exceeding one thousand pounds in the whole: excepting in a private stable, in which may be kept such loose hav and straw in quantity not exceeding twenty-five hundred pounds in the whole. No person shall have, put or keep any hay or straw uncovered in any stack or pile, or in any other way exposed, within one hundred yards of any building in said city, or shall have, put or keep within said city any hay, straw, hemp, flax, shavings or rushes in any building not built of stone or brick or iron, or covered with tile or slate or other fire-proof material, which is or shall be within ten feet of any dwelling-house or chimney whatsoever.

Right to Enter Stables, Vessels, etc.—Deposit of Ashes—Notice to Remove or Secure Combustible Materials—Collection of Expense of Removal.

§ 463. The commissioners and their officers or agents under the direction of said commissioners or either of them, are hereby empowered at any and all times to enter into and examine all buildings, dwelling-houses, livery and other stables, hay-boats or vessels, and places where any merchandise, gunpowder, hemp, flax, tow, hay, rushes, firewood, boards, shingles, shavings, or other combustible materials may be lodged, for the purpose of ascertaining all violations of any of the provisions of this title, and also the places where ashes may be deposited, and upon finding that any of them are defective or dangerous, or that a violation of this title exists therein, may deliver a written or printed notice, containing an extract from this title, of the provisions in reference thereto, and notice of any violation thereof, and notice to remove, amend or secure the same within a period to be fixed therein. And in case of neglect or refusal on the part of such occupant or of the possessor of such combustible materials, or any of them, so to remove, amend or secure the same within the time and in the manner directed by the said commissioners in such notice, the party offending shall forfeit and pay, in addition to any penalty otherwise imposed, the sum of twenty-five dollars, and the further sum of five dollars for every day's neglect to remove, amend or secure the same after being so notified. All the expenses of any removal, alteration or amendment as aforesaid, shall be paid in the first instance by the occupant, but shall be chargeable against the owner of such dwelling-house or other building, and shall be deducted from the rent of the same unless such expense be rendered necessary by the act or default of such occupant, or unless there be a special agreement to the contrary betweenthe parties.

IV.—The following extract from G. O. No. 25, B. of C., 1881, is again promulgated for the information of the force, and will be strictly complied with:

EXTRACT FROM G. O. No. 25—O. B. C., 1881.

- "The following rules, adopted by the Board, are hereby promulgated:
- "I.—Company officers shall make inspections in the company districts, and report all places where fireworks are sold

without permit, all places and persons selling kerosene oil without having a license, and persons having vegetable fibre in their buildings without a permit, and shall see that permits and licenses are for the current year, and properly and conspicuously displayed; shall also see that persons making fire in the street have permit to do so; all such permits and licenses to be issued from this Department.

- "II.—All notices from the Bureau of Combustibles must be served in the following manner:
- "I. By delivering the notice to the person to whom it is directed, or to some person of suitable age and discretion (in the employ of such person) on the premises.
- "2. If the person to whom the notice is directed has removed from the address given, make diligent inquiry in the neighborhood and ascertain, if possible, the present whereabouts of the person or persons addressed. Also ascertain the full name or names of the person or firm occupying the premises at the address given, the nature of the business carried on there, and the date when such business was commenced, giving full particulars in the return.
- "3. In serving a firm or partnership, ascertain the full names of the persons composing the firm, and state the same in the return.
- "4. In serving a corporation, ascertain the full names and the official titles of the officers thereof, and state the same in the return.
- "5. Proper report respecting all notices sent for service from the Bureau of Combustibles must be promptly returned to said Bureau. The fact of service, or in case of failure to serve any notice, the cause of such failure, must be stated in the return. All returns must be written in ink and signed by the party detailed to make the service. \* \* \* \* \* \* \*

V.—Chiefs of Battalion are directed to supervise the inspections within their respective districts, and to see that the provisions of this order are strictly carried out. In all cases where obstructions are reported to stairways, or to hydrants, or where lumber or combustibles are stored on roofs, they will make personal inspections of such obstructions, and see that the same are removed without delay.

Deputy Chiefs of Department are directed to report to this office any indifference or neglect which they may observe in carrying out the provisions of this order, and in all cases where streets are opened in front of hydrants, from any cause, and causing an obstruction thereto, they will report the facts to this office without delay.

Register of Officers of the Uniformed Force in Active Service on December 31.

	ORIGINAL APPOINTMENT.			Provotion.		
NAME.	Age	Grade.	Date.	Grades.	Dates.	
Chief of Department. Bonner, Hugh	27	Foreman	Sept. 18, 1865	Chief of Battalion 2d Assistant Chief of Department	Jan. 4, 1883 May 1, 1884	
Deputy Chiefs of Department.  McCabe, John	26	a Fireman	Sept. 26, 1866  July 1, 1873	Assistant Foreman. Foreman Chief of Battalion b ad Assistant Chief of Department Deputy Chief Department	July 1, 1874 May 16, 1881 May 1, 1884	
Reilly, Francis J  Chiefs of Battation.	22	Fireman	Scpt. 27, 1865	Foreman	July 1, 1871 May 1, 1872 June 6, 1872 Feb. 1, 1886 Aug. 4, 1886	
τ. Gicquel, Benj. A	24	Fireman	Oct. 16, 1865	Assistant Foreman . Foreman	June 1, 1866 July 1, 1871	

a Resigned, November 12, 1867.
 b Dismissed, July 2τ, 1886, and reinstated by court, July 1, 1837.

c Reduced to Fireman, April 1, 1872. d Re-assigned as Chief of Battalion, July 1, 1887.

NT		ORIGINAL APPOI	NTMENT.	Ркомотю	Promotion.		
Name.	Age.	Grade.	Date.	Grades.	Dates.		
2. Rowe, William	24	Foreman	Oct. 20, 1865	Chief of Battalion	May 21, 1873		
3. Fisher, John S	34	Fireman	Jan. 9, 1858	Assistant Foreman. F reman Chief of Battalion	June 1, 1868 July 15, 1869 May 21, 1873		
4. Campbell, Samuel.	25	Fireman	Oct. 16, 1865	Assistant Foreman. Foreman Chief of Battalion	Aug 1, 1869 Feb. 1, 1873 Sept. 23, 1875		
5. Bresnan, John J	22	Fireman	Oct. 20, 1865	Assistant Engineer of Steamer	Mar. 16, 1871 July 1, 1871 Mar. 1, 1873 Feb. 1, 1880		
6. Reeves, Michael F.	27	Fireman	Apr. 16, 1867	Assis ant Foreman . Foreman Chief of Battalion	Oct. 15, 1870 Aug. 1, 1871 Nov. 1, 1881		
7. Lally, Thomas	22	Fireman	Aug. 15, 1870	Assistant Foreman. Foreman Chief of Battalion	Apr. 21, 1873 Nov. 1, 1881 May 1, 1884		
8. Purroy, Charles I).	24	Private	Jan. 22, 1880	Fireman Assistant Foreman. Foreman Chief of Battalion	Apr. 1, 18?0 Apr. 5, 1881 Dec. 31, 1882 May 1, 1884		
9. McGill, Joseph F.	23	Fireman	Mar. 21, 1866	Assistant Foreman. Foreman Chief of Battalion	April 1, 1870 Oct. 1, 1872 Aug. 12, 1884		
10. Cashman, John J	22	Fireman	Oct. 17, 1866	Assistant Foreman. Foreman. Chief of Battalion	Feb. 15, 1872 Apr. 27, 1879 Aug. 4, 1880		
11. Kehoe, John H	22	Fireman	Oct. 20, 1865	Assistant Foreman. Foreman Chief of Battalion	Dec. 1, 1000		
12 Short, Peter H	26	Fireman	May 1, 1875	Assistant Foreman. Foreman. Chief of Battalion. Foreman. Chief of Battalion.	June 1, 1880 Apr. 18, 1883 Aug. 4, 1886 July 1, 1837 May 22, 1889		
1. Poynton, Joseph	26	Foreman	Sept. 8, 1865				
2. Spence, Arnot	31	Foreman	Oct. 20, 1865				
3. McNeil, Alex	29	Assistant Foreman	Oct. 16, 1865	Foreman	June 1, 1858		
4. Donohue, Patrick.	26	Fireman	Sept. 27, 1865	{Assistant Foreman. Foreman	June 1, 1868 Feb. 1, 1869		
g. Best, Samuel	32	Fireman	June 14, 1866	(Assistant Foreman.) Foreman			
6. Shaw, William	27	Assistant Foreman	Oct. 2, 1865	Foreman			
7. McCormick, Jas. }	27	Fireman	Oct. 6, 1865	{Assistant Foreman			
8. Castles, John	27	Fireman	July 27, 1866	Assistant Foreman.	Apr. 1, 1869		

e Re-assigned as Foreman, July 1, 1887.

N		ORIGINAL APPOI	NTMENT.	Ркомотю	PROMOTION.		
NAME.	Agc.	Grade.	Date.	Grades.	Dates.		
9. McLaughlin, Wm.	29	Fireman	May 22, 1868	(Assistant Foreman.) Foreman	June 1, 1869 Mar. 1, 1870		
10. Erb, George W	23	Fireman	Oct. 11, 1865	Assistant Foreman.	Feb. 1, 1869 July 25, 870		
11. Hayes, William F.	27	f Fireman	July 31, 1865 Apr. 1, 1866	Assis ant Foreman.	Oct. 1, 1869 Oct. 15, 1870		
12. Landers, Wm. H.	4I	Fireman	Sept. 29, 1865	Assistant Foreman.	Nov. 17, 1865 Dec. 24, 1870		
13. Wolff, Charles A.	33	Fireman	Mar. 21, 1866	Assistant Foreman.	Aug. 1, 1870 July 1, 1871		
14. Meagher, Dan. J.	23	Fireman	Oct. 6, 1865	Assis'ant Foreman.   Foreman	Dec. 24, 1870 Nov. 1, 1871		
15. Vetter, Peter, Jr	26	Firem n	Oct. 27, 1865	Assistant Foreman.	June 1, 1868 May 1, 18 2		
16. Cowie, John A	30	Assistant Foreman	Sept. 14, 1865	Foreman	Mar. 1, 1873		
17. Jones, Henry M	27	Assistant Foreman	Sept. 27, 1865	Foreman	Mar. 1, 1873		
18. Ward, John	26	Fireman	Sept. 25, 1855	(Assistant Foreman.	Jan. 1, 18-0 Mar. 1, 1873		
19. Sattler, John	29	Fireman	Oct. 20, 1865	Assistant Foreman.	July 1, 1871 Mar. 1, 18 3		
20. Sheridan, Philip	23	Fireman	Oct. 20, 1865	Assistant Foreman.	July 1, 18 1 June 16, 1873		
21. Connor, David	25	Fireman	July 31, 1865	Assistant Foreman Foreman	Nov. 1, 1871 June 16, 1873		
22. Welsh, John	23	Fireman	Oct. 11, 1865	Engineer of Steamer Assistant Foreman. Foreman	Aug 1, 1866 Feb. 15, 1872 June 16, 18, 3		
23. Chambers, Chas	31	Engineer of S.eamer	Sept. 14, 1865	{ Assistant Foreman Foreman	July 1, 1873 Dec. 1, 1873		
24. Perley, Hamilton F	21	{Ass't Engineer } of Steamer}	Mar. 15, 1873	Assistant Foreman.	Jan. 15, 1874 Aug. 1, 1874		
25. Monroe, James H.	29	Fireman	Oct. 16, 1865	Foreman  District Engineer  Chief of Battalion.  Foreman	Apr. 17, 1867 July 1, 1871 May 21, 1873 Feb. 15, 1875		
26. Van Horn, Thos. J	26	Fireman	May 6, 1871	{Assistant Foreman.   Foreman	Jan. 15, 1874 Mar. 1, 1875		
27. Kittson, Hugh	28	Fireman	Sept. 25, 1865	{Assistant Foreman . Foreman	July 1, 1873 Mar. 1. 1875		
28. Eagan, John J	25	Fireman	Sept. 11, 1865	{Assistant Foreman . Foreman	Oct. 15, 1870 Aug. 20, 1875		
29. Fisher, Isaac	22	\begin{cases} \hat{h} & Engineer of \\ Steamer \ldots \end{cases} \ldots \text{Ass't Engineer} \\ of Steamer \ldots \end{cases}	Oct. 1, 1869 Nov. 1, 1872	Engineer of Steamer Assistant Foreman.	July 1, 1873 Apr. 15, 1874		

f Resigned, January 15, 1866. g Reduced to Foreman, February 15, 1875.
h Resigned, May 21, 1872.

Nave		ORIGINAL APPOI	NTMENT.	PROMOTION.		
NAME.	Age.	Grade.	Date.	Grades.	Dates.	
30. Wray, Robert	23	Fireman	Oct. 16, 1865	Assistant Engineer of Steamer Assistant Foreman.	June 1, 1871 Sept. 1, 1872 Mar. 12, 1872	
31. Bradley, Daniel	30	Fireman	Mar. 1, 1866	{Assistant Foreman. Foreman	Mar. 1, 1873 Apr. 3, 1878	
32. Bermingham, Wm.	34	Fireman	Dec. 15, 1873	{Assistant Foreman. Foreman	Oct. 1, 1871 Dec. 8, 1875	
33. Farrell, Robert R.	26	{ i Ass't Engin'r of Steamer} Ass't Engineer of Steamer}	Nov. 1, 1871 Mar. 15, 1873	A sistant Foreman.	Jan. 15, 187. Feb. 1, 188	
34. Fleming, Wm. H.	22	Fireman	Oct. 17, 1870	{Assistant Foreman. Foreman	Aug. 2, 187 Mar. 17, 188	
35. Shay, Charles H	21	Private	Nov. 21, 1877	Fireman	Apr. 1 1876 Apr. 1, 1876 Apr. 4, 1876 Dec. 10, 1870 June 1, 1886	
36. Perley, Charles H.	22	Private	Jan. 17, 1879	{Assistant Foreman. Foreman	Feb. 1, 1879 Aug. 25, 1886	
37. O'Brien, Edward.	25	Fireman	July 1, 1869	{Assistant Foreman. Foreman	Mar. 1, 1873 Sept. 17, 188	
38. Brown, Wm. W	23	Fireman	June 14, 1866	{Assistant Foreman. Foreman	Dec. 1, 1873 Apr. 1, 1883	
39. Byrne, Joseph P	28	Fireman	Oct. 1, 1871	Assistant Foreman.	May 1, 187 July 1, 188	
40. Duane, William	28	Fireman	Aug. 8, 1868	{Assistant Foreman. Foreman	July 20, 187 Nov. 1, 188	
41. Colby, William J	30	Fireman	July 7, 1875	(Assistant Foreman.) Foreman	June 1, 1876 Nov. 1, 188	
42. Searle, George S	21	Fireman	Nov. 15, 1874	Assistant Foreman Foreman	July 22, 188 Nov. 18, 188	
43. Shaw, Joseph	28	Steamer   Ass't Engineer of Steamer   of Steamer	Oct. 13, 1865 Feb. 1, 1874	Engineer of Steamer Assistant Foreman. Foreman	Mar. 15, 1878 Aug. 8, 1878 Dec. 31, 1882	
44. Cusick, George	24	Fireman	Apr. 21, 1869	{Assistant Foreman. Foreman	May 15, 187 Apr. 18, 188	
45. McAdams, Hy. W.	23	Fireman	Sept. 18, 1874	{Assistant Foreman. Foreman	Nov. 1, 188 May 23, 188	
46. Gleason, Luke	25	& Fireman	Jan. 1, 1869 Dec. 1, 1872	Assistant Foreman.	Apr. 8, 1886 July 1, 188	
47. Murray, Henry	24	{ Fireman	Oct. 13, 1865 Dec. 17, 1874	{Assistant Foreman. {Foreman	Oct. 1, 1877 Jan. 15, 188	

*i* Resigned, May 21, 1872. *j* Resigned, October 16, 1871.

k Resigned, June 1, 1872.
l Resigned, March 31, 1869.

27	ORIGINAL APPOINTMENT.		PROMOTION.		
Name.	Age.	Grade.	Date.	Grades.	Dates.
48. Gooderson, Fred- \ erick W., Jr	23	Private	Oct. 13, 1879	Assistant Engineer of Steamer Assistant Foreman.	Apr. 1, 1880 May 23, 1883 May 3, 1884
49. McCutchen, James	31	Fireman	Sept. 18, 1865	{Assistant Foreman. Foreman	Mar. 1, 1869 May 20, 1884
50. Hart, Michael	28	Fireman	Oct. 20, 1865	Assistant Foreman.	July 1, 1871 May 20, 1884
51. Connolly, Patrick J	29	Fireman	Jan. 15, 1873	{Assistant Foreman. Foreman	Nov.16, 1881 May 20, 1884
52. McCabe, Hugh D.	25	Private	Feb. 9, 1882	{Assistant Foreman. {Foreman	July 22, 1883 May 20, 1884
53. Shea, Joseph	29	Foreman	May 20, 1884		
54. Cosgrove, James	21	Private	Jan. 1, 1878	Assistant Engineer of Steamer Assistant Foreman. Foreman	Mar.21, 1880 July 1, 1881 June 6, 1884
55. Falvey, John	21	Fireman	Mar. 11, 1871 July 18, 1874	m Assistant Foreman {Assistant Foreman. {Foreman	Feb. 15, 1872 Nov. 1, 1881 Aug. 1, 1884
56. McDonald, Alex	28	{ n Fireman	July 31, 1865 June 12, 1873	Assistant Foreman. Foreman	Jan. 7, 1876 Aug. 7, 1884
57. Scannell, Edw. A.	24	Private	Apr. 7, 1881	Assistant Foreman. Foreman	May 20, 1884 Aug. 16, 1884
58. Binns, John	25	Private	Mar. 22, 1882	{Assistant Foreman. Foreman	May 20, 1884 Aug. 16, 1884
59. Golden, John J	30	Fireman	Dec. 18, 1874	Assistant Foreman. Foreman	Feb. 1, 1883 Aug. 22, 1884
бо. Barry, James	23	{	Jan. 20, 1874 Feb. 12, 1876	Assistant Foreman.	May 20, 1884 Aug. 22, 1884
51. Sullivan, Thomas.	26	{Dist. Engineer Foreman	Sept. 6, 1865 Aug. 23, 1884	***************************************	
52. Kenny, Thomas A	29	Fireman	Aug. 4, 1876	Assistant Foreman. Foreman	July 10, 1879 Feb. 1, 1885
63. Lawler, Daniel	24	Fireman	May 1, 1875	{Assistant Foreman. Foreman	Aug. 16, 1884 Feb. 1, 1885
64. Callaghan, Dnl. H.	26	Fireman	Mar. 1, 1873		July 10, 1879 June 25, 1885
65. Cook, Martin	23	Hoseman	Jan. 1, 1870	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman. Foreman Foreman	July 24, 1871 Jan. 13, 1874 Jan. 15, 1874 Mar. 1, 1875 Nov.15, 1885
66. Teal, Henry	21	Fireman	Aug. 1, 1871		Sept.22, 1880 Nov. 15, 1885

m Dismissed, June 19, 1874.

p Dropped, May 21, 1873.

nResigned, June 8, 1872.  $\sigma$ Resigned, July 1, 1875. qReduced to Assistant Foreman, December 2, 1875.

Navie.		ORIGINAL APPOI	NTMENT.	Promotion.		
NAVE.	Age.	Grade.	Date.	Grades.	Dates.	
67. Cooney, John J	29	Private	Sept. 1, 1882	Assistant Engineer of Steamer Assistant Foreman.	June 6, 18?4	
68. Ahearn, Thomas J	23	Fireman	May 9, 1873	{Assistant Foreman. Foreman	Apr. 1. 1881 Feb. 25, 1806	
69. White, John H	30	Fireman	Jan. 2, 1875	{Assistant Foreman. Foreman	Feb. 1, 1883 Feb. 25, 1886	
70. Fraser, William D	2 }	Fireman	July 3, 1872	Assistant Foreman.	May 20, 1884 D.c. 1, 1886	
71. Croker, Edward F.	21	Private	June 22, 1884	(Assistant Foreman. Foreman	Aug. 15, 1884 Feb 25, 1886	
7 . McNamara, M. J.	25	Fireman	Apr. 21, 1873	Assistant Foreman.	Aug. 27, 1884 Dec. 1, 1886	
73. Nugent, James M.	24	Private	Jan. 4, 1884	{Assistant Foreman. Foreman	July 1, 1885 Jan. 15, 1 87	
74. O'Hearn, Thomas	29	Fireman	June 12, 1875	Assistant Foreman.	July 1, 1883 Feb. 1, 1.87	
75. S'egmann, Louis L	24	Fireman	Feb. 8, 1871	{ Assistant Foreman. Foreman	Jan. 15, 1874 Mar. 1, 1887	
76. McAvoy, Michael	25	Fireman	Dec. 1, 1865	Assistant Foreman.	Dec. 31, 1°82 May 6, 1887	
77. Quirk, William	27	Private	May 19, 1881	{ Assistant Foreman. Foreman	May 20, 1884 Sept. 1, 1888	
78. Farley, Thomas	25	{r Fireman	May 13, 1868 Sept. 1, 1869	(Assistant Foreman.) Foreman.	Apr. 10, 1832 June 1, 1883	
79. Murphy,Lawrence	24	Fireman	June 12, 1871	{Assistant Foreman. Foreman	May 17, 1883 June 1, 1 83	
80. Gormley, Patrick.	28	Private	May 15, 1884	Assistant Foreman.	July 1, 1885 June 6, 1889	
81. Moss, Joseph	28	Fireman	Dec. 1, 1871	{As istant Foreman. Foreman	Nov. 1, 1881 June 6, 1889	
82. Honan, John S	25	Private	May 8, 1883	Assis ant Foreman.	Nov. 15, 1885 Nov. 19, 1889	
83. Riordan, John	21	Fireman	Sept. 20, 1866	{ Assistant Foreman. Foreman.	Nov. 1, 1871 Nov. 19, 1889	
Assistant Foremen.						
1. Schuck, Henry	33	Fireman	Sept. 18, 1865	Assistant Foreman.	Nov. 22, 1865	
2. Smith, Edward S.	23	Fireman	Sept. 11, 1865	Assistant Foreman.	Dec. 15, 1868	
3. Hicks, Matthew	21	Fireman	Aug. 10, 1868	Assistant Foreman.	Oct. 15, 1870	
4. Lynar, Andrew	28	Fireman	Jan. 21, 1868	Assistant Foreman.	Feb. 15, 1872	
5. Brennan, T P	25	Fireman	Oct. 6, 1865	Assistant Foreman.	July 1, 1872	

	ORIGINAL APPOINTMENT.			PROMOTION.		
NAME.	Age.	Grade.	Date.	Grades.	Dates.	
6. McNamee, Charles	28	Fireman	July 1, 1869	Assistant Foreman.	Mar. 1, 1873	
7. Jones, Walter H	25	Fireman	Oct. 21, 1870	Assistant Foreman.	Mar. 1, 1873	
8. Conaghan, Patrick	23	Fireman	Oct. 20, 1865	Assistant Foreman.	Apr. 21, 1873	
9. Braisted, Wm. C.	25	Fireman	July 3, 1872	Assistant Foreman.	June 16, 1873	
10. Campbell, James A	27	Fireman	Sept. 29, 1865	Assistant Foreman.	Aug.15, 1873	
11. Moore, Edward S	31	Fireman	Oct. 16, 1865	{ S Assistant Foreman Assistant Foreman.	Dec. 1, 1865 Nov. 3, 1873	
12. Louis, Albert F	24	Fireman	Sept. 14, 1865	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman.	Apr. 1, 1871 Sept. 11, 1872 Jan. 15, 1874	
13. Burnett, Henry	33	Fireman	Sept. 22, 1865	Assistant Foreman	Jan. 15, 1874	
14. Cartright, Stephen	27	Fireman	Aug. 1, 1871	Assistant Foreman.	May 15, 1874	
15. Flock, William F.	27	Ass't Foreman	Sept. 8, 1865	t Foreman	Oct. 15, 1870	
16. Carey, Francis	25	Fireman	June 2, 1868	Assistant Foreman.	Dec. 21, 1874	
17. Wright, Aug.H	29	Fireman	May 4, 1875	Assistant Foreman.	May 1, 1876	
18. Kruger, Charles W., Jr	22	{ Ass't Engineer of Steamer	July 3, 1872	Assistant Foreman.	Sept. 27, 1877	
19. Kenehan, Rich. F.	30	Fireman	July 1, 1875	Assistant Foreman.	Apr. 3, 1878	
20. Finn, John	29	Fireman	Sept. 20, 1866	Assistant Foreman.	Aug. 21, 1878	
21. McCarthy, Patrick	25.	Fireman	June 15, 1872	Assistant Foreman.	Apr. 27, 1879	
22. O'Rourke, Owen.	25	{ u Fireman	Sept. 22, 1865 Feb. 12, 1875	Assistant Foreman.	July 10, 1879	
23. Browning, William	21	Fireman  Ass't Engineer of Steamer	Apr. 23, 1869 May 9, 1873	{v Assistant Engi- neer of Steamer. Engineer of Steamer Assistant Foreman.	June 1, 1871 Aug. 1, 1874 Feb. 1, 1880	
24. O'Reilly, Pat. H	23	Fireman	Aug. 21, 1875	Assistant Foreman.	July 20, 1880	
25 Kerrigan, Francis	29	Fireman	May 1, 1875	Assist nt Foreman.	Sept. 16, 1880	
26. McCarthy, John	29	Fireman	Sept. 15, 1871	Assistant Foreman.	June 9, 1881	
27. Gerity, James J	24	Fireman	Feb. 1, 1874	Assistant Foreman.	Nov. 1, 1831	
28. Kelly, Thomas	28	w Fireman	Sept. 18, 1865 June 15, 1867	Assistant Foreman.	Nov.25, 1881	
29. Hyde, David	27	Fireman	July 17, 1873	Assistant Foreman.	Mar. 22, 1882	
30. Murphy, John	24	Fireman	Oct. 17, 1870	Assistant Foreman.	Aug. 7, 1882	
31. Aiken, Alex. D	24	Fireman	July 19, 1871	Assistant Foreman.	Dec. 1, 1882	
32. Barber, John	25	Fireman	Nov. 3, 1870	Assistant Foreman.	Feb. 1, 1883	

s Reduced to ranks, May 9, 1866. t Reduced to Assistant Foreman, June 24, 24 Discharged while detailed as Carpenter, January 1, 1875. v Resigned, September 16, 1872.

37		ORIGINAL APPOI	NTMENT.	Promotion.		
Name.	Age.	Grade.	Date.	Grades.	Dates.	
33. Daniels,Clement L	25	Fireman	Oct. 11, 1873	Assistant Foreman.	Mar. 4, 188	
34. Ryan, Ed. F	22	Fireman	July 3, 1872	Assistant Foreman.	Mar. 6, 188	
35. Kennedy, Math. T	28	Private	Dec. 21, 1877	Assistant Engineer of Steamer Assistant Foreman.	Nov. 21, 187 May 23, 188	
36. Margison, Charles	27	Private	Jan. 22, 1877	Assistant Engineer of Steamer Assistant Foreman.	May 1, 187 May 23, 188	
37. Jones, William H	29	Ladderman	Sept. 25, 1875	Private	Apr. 1, 1878 May 23, 188	
38. Needham, John T	27	Private	Jan. 1, 1881	Assistant Foreman.	May 23, 198	
39. Hopper, Charles	25	x Fireman Fireman	Mar. 2, 1870 Feb. 12, 1876	Assistant Foreman.	Aug. 1, 188	
40. Meehan, Edward.	24	Fireman	July 23, 1870	Assistant Foreman.	Aug. 13, 188	
41. Beekler, Jacob	2	Fireman	Mar. 15, 1871	Assistant Foreman.	Nov. 1, 188	
42. Autenreith, Chas. J	25	Private	Feb. 12, 1881	Assistant Engineer of Steamer Assistant Foreman.	Dec. 17, 188; May 20, 188.	
43. Head, Thomas	26	Fireman	Feb. 15, 1869	Assistant Foreman.	May 20, 188	
41. Touhey, Martin J.	23	Fireman	Mar. 15, 1872	Assistant Foreman.	May 20, 188	
45. Donohue, Malachi	24	Fireman	June 10, 1870 Dec. 1, 1873	yAssistant Foreman. Assistant Foreman.	Oct. 17, 187 May 20, 188	
46. Gaffney, Andrew	27	Fireman	Dec. 1, 1873	Assistant Foreman.	May 20, 138	
47. Reed, Samuel	25	Fireman	Sept. 1, 1875	Assistant Foreman.	May 20, 188	
48. Hennessey, Wm	30	z Fireman Private	Dec. 21, 1874 Jan. 18, 1832	Assistant Foreman.	May 20, 188	
49. Leonard, John H	32	Private	Feb. 1, 1877	Fireman	Apr. 13, 187 Apr. 20, 187 Oct. 4, 187 Aug. 16, 188	
50. O'Grady, Joseph.,	27	Private	Nov. 24, 1877	Assistant Engineer of Steamer Assistant Foreman.	Oct. 20, 188 Aug. 15, 188	
51. Reilly, Bernard J	27	Fireman	May 1, 1875	Assistant Foreman.	Aug. 21, 188	
52. Reilly, Michael A.	22	Private	Apr. 4, 1881	Assistant Foreman.	Aug. 21, 188	
53. Kinsella, Henry	27	Private	Feb. 3, 1883	Assistant Foreman.	Aug. 27, 188	
54. McNamara,John J	25	Fireman	Dec. 7, 1877	Assistant Engineer of Steamer Assistant Foreman.	Apr. 11, 188 July 1, 188	
55. Petersen, Adolph J	25	F.reman	Oct. 25, 1873	Assistant Foreman.	July 1, 188	
56. Tobin, Edward H.	22	Fireman	May 4, 1875.	Assistan Foreman.	July 1, 188	

x Resigned, August 1, 1871. y Dismissed, November 23, 1873. z Dismissed, October 19, 1876.

	ORIGINAL APPOINTMENT.			PROMOTION.		
NAME.	Age.	Grade.	Date.	Grades.	Dates.	
57. Beshinger, Joseph	23	Private	May 10, 1880	Assistant Foreman.	July 1, 1885	
58. Banta, Samuel	28	Private	Jan. 22, 1883	Assistant Foreman.	July 1, 1885	
59. Ryan, Patrick F	28	{ aa Engineer of Steamer } Ass't Engineer of Steamer}	Nov. 1, 1871 Sept. 6, 1874	Engineer of Steamer Assistant Foreman.	July. 21, 1875 Nov. 15, 1885	
63. Delaney, James	23	Fireman	Aug. 1, 1869	Assistant Engineer of Steamer Engineer of Steamer Assistant Foreman.	Mar. 16, 1871 Nov. 16, 1883 Nov. 15, 1885	
61. Shute, James H	23	Fireman	Oct. 17, 1873	Assistant Foreman.	Feb. 1, 1886	
62. Burns, John J	21	Private	Aug. 17, 1883	Assistant Foreman.	Feb. 1, 1836	
63. Martin, Michael	26	Fireman	July 1, 1873	Assistant Foreman.	Dec. 1, 1886	
64. Miller, William	28	Private	Apr. 2, 1881	Assistant Foreman.	Dec. 1, 1886	
65. Flaherty, James	29	Private.,	Feb. 15, 1882	Assistant Foreman.	Dec. 1, 1886	
66. Whelan, John T	29	Fireman	May 20, 1884	Assistant Foreman.	Dec. 1, 1886	
67. Taylor, Joseph W.	25	Fireman	Jan. 1, 1873	Assistant Foreman.	Mar. 1, 188	
68. Nash, William H.	21	Fireman	Sept. 9, 1876	Assistant Engineer Engineer	Oct. 1, 1876 Jan. 1, 1886 Feb. 1, 1887	
69. Burke, Coleman J.	22	Private	Jan. 1, 1878	Assistant Engineer. Engineer	Jan. 17, 1836 Jan. 1, 1886 Feb. 1, 1887	
70. Norris, Richard J	25	Private	July 15, 1879	Assistant Foreman.	Feb. 1, 1887	
71. Reilly, Michael F.	29	Private	Jan. 13, 1880	Assistant Foreman.	Feb. 1, 188;	
72. Farrel', George F.	25	Private	Nov. 1, 1880	Assistant Foreman.	Feb. 1, 188	
73. Reilly, Henry P	21	Private	Oct. 21, 1881	Assistant Foreman.	Dec. 27, 188	
74. McCartney, J. J	28	Fireman	Aug. 1, 1884,	Assistant Foreman.	Dec. 27, 188	
75. Naughton, John J.	23	Private	Dec. 1, 1881	Assistant Engineer. Engineer Assistant Foreman.	Feb. 2, 1883 Feb. 1, 883 June 1, 1888	
76. Coyle, Thomas	31	Fireman	Feb. 16, 1870	Assistant Foreman. Foreman  bb Fireman Assistant Foreman.	Mar. 1, 1873 May 1, 1876 Jan. 19, 1886 June 1, 1886	
77. Mackey, Henry F.	26	Fireman	Oct. 15, 1872	Assistant Foreman.	June 1, 1889	
78. O'Brien, Pat., No. 1	26	Fireman	Nov. 1, 1872	Assistant Foreman	June 1, 1889	
79. Hanlon, Peter	31	Fireman	Feb. 13, 1874	Assistant Foreman.	June 1, 1889	
85. Cain, Daniel L	27	Private	Dec. 23, 1880	Assistant Foreman.	June 1, 188	
81. Sloan, Peter	27	Fireman	Oct. 26, 1881	Assistant Foreman.	June 1, 188	
82. McNicol, John A.	28	Fireman	Dec. 20. 1886	Assistant Foreman .	June 1, 188	

Name.		ORIGINAL APPOI	NTMENT.	PROMOTION.		
	Age.	Grade.	Date.	Grades.	Dates.	
83. Slevin, Michael H.	29	Fireman	Dec. 20, 1886	Assistant Foreman.	June 1, 1889	
84. Hern, John	23	Fireman	Sept. 11, 1865	Assistant Foreman.	Nov. 19, 1889	
85. Reilly, Lawrence J	25	Fireman	May 10, 1871	Assistant Foreman.	Nov. 19, 1889	
80. Freel, Thomas F.	23	Private	July 18, 1881	Assistant Foreman.	Nov. 19, 1889	
87. Farley, John	28	Private	Jan. 19, 1832	Assistant Foreman.	Nov. 19, 1889	
88. Grady, J hn J	26	Private	Feb. 20, 1882	Assistant Foreman.	Nov. 19, 1889	
89. Barrett, Thomas F	24	Private	Feb 1, 1883	Assistant Foreman.	Nov. 19, 1889	
90. Martin, Joseph B	23	Private	Jan. 18, 1884	Assistant Foreman.	Nov. 19, 1889	

Year of Entry into the Uniformed Force of Officers and Members in Active Service on December 31.

APPOINTED IN-	Officers.	Engineers.	FIREMEN.	TOTAL.
1865	49	9	34	92
1866	. II	5	15	31
1867	I	2	1	4
1868	7	6	7	20
1869	9	6	17	32
1870	7	2	12	21
1871	15	2	7	24
1872	7	4	21	32
1873	15	7	41	63
1874	7	8	35	50
1875	12	7	18	37
1876	2		7	9
1877	6	10	3	19
1878	2	I	2	5
1879	3	7	6	16
1880	5	12	23	40
1881	10	4	30	44
1882	6	3	46	55
1883	5	10	63	78
1884	7	11	70	88
1885		5	30	35
1886	2	8	43	53
1887		5	37	42
1888		2	99	101
1889			11	11
	188	136	678	1,002

***************************************		T'otal.	99	139	2,834	3,039
		Fire. ,	:	:	2,834	2,834
		Smoke, etc., issuing from Premises.	:	115	:	115
		Reflection of Distant Fire.	:	:	:	:
		Reflection from Stoves, etc.	:	24	:	24
		Not ascertained.	ro	:	:	01
1		Malicious Mischief.	21	:	:	21
	CAUSE.	Івпотапсе.	6	:	:	o,
		Heat and Disarrangement of Aut. Telegraph.	6	:	:	6
		Fire outside of City.	:	:	:	:
		Explosions.	9	:	:	9
		Exhibition of Depart-	cc	:	:	m
		Error.	:	;	:	: }
		Cry of "Fire."	н	:	:	н
		Accidents.	7	:	:	7
		Total.	99	139	2,834	3,039
	ECEIPT	Automatic Telegraph	6	:	6	18
	MANNER OF RECEIPT.	Леграјју.	11	26	1,312	1,379
	MANNE	Special Department Tele-graph Signals.	4	4	12	50
		From Department Street Alarm-boxes.	42	79	1,501	1,621
		ALARMS.	Unnecessary	Indication of fire	Fires	Total

tor fires.	ŭ	ä	ä	ş	š
oved to be	÷	ŧ	:	z	ï
11ch 243 pr	913	442	229	1,007	2,834
ot w	÷	3	ü	÷	;
2 I alarms Were communicated by attaches of this Department, of which 243 proved to be for fires.	" Police "	District key-holders,	Citizen "	all other means,	all the various means,
communicated	3	3		t	2
arms were	3	:	33	*	3
2 I 2	948	474	248	1,118	3,039

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# Statistics of Fires.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
In Buildings—													
Confined to point of)	0			- 6	0		183	206		183	218	280	
starting	238	259	247	236	183	192			170				2,595
Confined to building.  Extended to other)	16	22	9	II	II	II	6	6	2	8	13	19	134
buildings	4	2	4	2	2	I	2	••	I	3	••	2	23
Total in build-	258	283	260	249	196	204	191	212	173	194	231	301	2,752
In vessels	2	2	3	4	1		1	6	1	ı		4	25
In places other than buildings and vessels	3	3	5	5	5	5	4	5	6	2	10	4	57
Total	263	288	268	258	202	209	196	223	180	197	241	309	2,834
Extinguished—		===	=	=	=	=	==	=	=	=	=		==
Without engine)	160	180	171	166	133	143	145	155	128	139	168	205	1,893
Stream	65	66	59	60	44	47	41	40	38	40	58	70	629
stream						16	6	21				22	228
engine streams \\ With more than \)	30	29	32	17	19	10	0	21	10	15	11	. 22	220
three engine streams	7	13	6	15	6	3	4	7	4	3	4	12	84
Total	263	288	268	258	202	209	196	223	180	197	241	309	2,834
Extent of damage to build- ings and vessels—													
Built mainly of brick, stone or iron:													
Slight	84	69	78	47	38	34	9	39	39	36	39	48	560
Considerable	6	6	8	10	7	5	11	7	7	3	10	22	102
Destroyed				6	••	1	••	1		••			8
Total	90	75	86	63	45	40	20	47	46	39	49	70	670
Extent of damage to build- ings and vessels—	=			_		==				=	=	=	
Built mainly of wood:													
Slight	10	8	II	16	3	2	2	3	2	2	I	3	63
Considerable	1		6	2	I		1	1	3	5	I	1	22
Destroyed				1	2			•••			1		4
Total	11	8	17	19	6	2	3	4	5	7	3	4	89
Total buildings and ves- sels damaged	101	83	103	82	51	42	23	51	51	46	52	74	759

											$\overline{}$		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
To which the damage										3			
Slight	94	77	89	63	41	36	11	42	41	38	40	51	623
Considerable	7	6	14	12	8	5	12	8	10	8	11	23	124
Destroyed				7	2	r		ı			I		12
Number of fires resulting in damage to contents only; buildings or vessels not damaged	36	41	32	39	36	52	53	62	49	43	44	60	547

# Number of Fires Occurring each Day of the Week, and during the Different Hours and Periods of the Day, by Months.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Monday	30	46	30	46	35	38	32	37	38	22	32	42	428
Tuesday	49	43	33	41	18	29	28	31	27	25	35	43	402
Wednesday	49	31	43	41	42	31	26	21	25	32	38	54	433
Thursday	46	48	25	46	35	24	35	31	25	31	33	39	418
Friday	30	46	48	26	32	30	36	39	18	40	37	47	429
Saturday,	32	37	46	36	16	33	22	27	13	31	38	39	370
Sunday	27	37	43	22	24	22	17	37	34	16	28	45	354
Between the hours of—		=								=		=	==
12 midnight and 1 a.m	15	13	9	5	3	5	9	7	8	2	6	13	95
1 a.m. and 2 a.m	8	4	7	7	10	5	I	6	4	5	7	8	72
2 a. m. and 3 a. m	11	6	5	5	5	5	5	13	3	5		3	66
3 a.m. and 4 a.m	8	5	4	7	5	2	4	7	3	5	5	5	60
4 a. m. and 5 a. m	2	3	5	3	3	3	5	3	I	10	3	4	45
5 a. m. and 6 a. m	6	4	7	4	6	5	I	1	5	2	4	4	49
6 a. m. and 7 a. m	9	8	7	3	4	τ	4	3		6	4	4	53

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Between the hours of-													
7 a. m. and 8 a. m	4	7	6	6	4	6	3	2	5	6	2	8	59
8 a.m. and 9 a.m	3	15	8	3	7	4	5	8	2	8	9	10	82
9 a. m. and 10 a. m	8	12	13	10	6	6	8	9	6	5	10	9	102
10 a.m. and 11 a.m	11	13	13	14	10	9	9	4	tı	. 9	12	7	122
11 a. m. and 12 m	9	9	18	15	14	10	6	9	8	13	8	12	131
12 m. and 1 p. m	4	14	11	8	2	14	9	.6		12	2	7	89
1 p. m. and 2 p. m	8	13	12	11	5	15	11	6	11	4	9	12	117
2 p.m. and 3 p.m	7	20	12	7	10	12	4	8	9	6	4	14	113
3 p. m. and 4 p. m	15	17	10	14	13	9	7	12	7	9	12	9	134
4 p. m. and 5 p. m	8	15	10	6	2	4	6	13	11	10	15	26	126
5 p.m. and 6 p.m	34	21	15	15	7	12	7	7	6	11	2,5	43	203
6 p. m. and 7 p. m	20	21	12	28	7	11	4	18	16	17	15	28	197
7 p. m. and 8 p. m	19	19	29	31	15	9	14	22	18	10	21	18	225
8 p. m. and 9 p. m	19	18	17	23	19	25	21	16	13	7	24	25	227
9 p. m. and 10 p. m	19	II	11	9	16	15	26	23	14	17	17	25	203
10 p. m. and 11 p. m	9	10	16	14	16	12	9	14	7	9	II	8	135
11 p. m. and 12 midnight	7	10	11	10	13	10	18	6	12	9	16	7	129
Between 6 a.m. and 6 p.m	120	164	135	112	94	108	79	87	76	99	112	161	1,347
Between 6 p. m. and 6 a. m	143	124	133	146	108	101	117	136	104	98	129	148	1,487
Total	263	288	268	258	202	209	196	223	180	197	241	3c9	2,834

## Notable Fires.

January 23.—Nos. 88 and 90 Walker street, a seven-story brick building, 50 x 100 feet, occupied by manufacturers and dealers in stamps, dies, jewelry, novelties, lithographs, etc. The fire originated on the second floor, and its extension to the third, fourth, fifth, sixth and seventh floors and the roof, was greatly facilitated by the belt holes in the flooring. The building was considerably damaged. The first alarm was received at 11.58½ P. M., and second and third alarms were

sent out at 12.14 and 12.25 A. M., respectively, on the 24th instant, and a special call for Engine Company No. 18 at 1.18 A. M. The fire required the services of thirteen engine and four hook and ladder companies and one water tower, and was under control in one hour and ten minutes. The cause of the fire was heat from steam-pipes igniting oily rags, and the loss amounted to \$67,950.

March 15.—No. 85 Gold street, a five-story brick building, 40 x 60 feet, occupied by leather dealers. The fire originated on the third floor and extended to the fourth and fifth floors by hoistways and stairways, considerably damaging the building. The first alarm was received at 6.47 ½ P. M., and the second and third alarms were sent out at 6.54 and 7.01 P. M., respectively. The fire required the services of eleven engine and four hook and ladder companies and one water tower, and was under control in fifty minutes. The cause of the fire was not ascertained, and the loss amounted to \$76,200.

April 19.—Fifty-ninth street and Twelfth avenue, a five-story brick building,  $150 \times 200$  feet, divided by a wall through the centre. The front (or Fifty-ninth street) half was occupied as a lard refinery and rendering establishment, and the rear as a storehouse for general merchandise. The Chief of Department made a special report of the operations at this fire to the following effect:

The fire originated in the lard refinery, and owing to the nature of the contents, and to the greasy condition of the building itself, resulting from the business carried on therein, spread with great rapidity; in fact the entire structure was on fire before the arrival of the force in response to the first alarm, received by the Department at 3.40½ o'clock P. M. from the fire-alarm box at Sixtieth street and Twelfth avenue.

The first company (Engine 23), located at Fifty-eighth street, near Broadway, reached the scene of the fire in about three minutes after the alarm, and its commanding officer at once sent out a third alarm, which was succeeded by special

			D Occur	PIED AS					its.
$O_{ m RIGIN}$ .	Accidental.	Places of Amusement and Recreation.	Religious and Educa- tional Institutions.	Lumber, Coal and Wood Yards.	Piers, Docks, etc.	Vessels.	Miscellaneous.	Cotal.	Aggregate Loss to Structures and Contents.

	rgate Loss to Contents.	\$1.510 \$1.510 \$1.510 \$1.520	13.65;47 17.777 13.65;3 13.65;47 11.1777 11.17	\$550.087 \$6,600 \$6,600 \$1,040 \$1,0	2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	\$195.856 382.884 435.148 435.148
8	l'	4 6 6 6 9 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	&: & E: &: &: & E:	An the first one of the first		46.5
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Extent of Loss at Fires.

Loss Less THAN-		\$50 at 1,683 fires.	100 at 1,936 "	1,000 at 2,537 "	5,000 at 2,731 "	10,000 at 2,778 "	20,000 at 2,805 "	30,000 at 2,814 "	40,000 at 2,817 "	50,000 at 2,821 "	60,000 at 2,824 "	70,000 at 2,827 "	80,000 at 2,830 "	90,000 at 2,832 "	125,000 at 2,833 "	1,500,000 at 2,834 "	
PERCENTAGE TO WHOLE NUMBER OF FIRES.	+35	.23	80.	.21	90.	10.			,								
YEAR.	1,009	674	253	109	194	47	27	6	3	4	3	3	3	81	н	H	2,834
DEC.	ro3	63	32	73	20	co	7	co	:	H	н	:	н	I	:	:	308
Nov.	105	9	50	37	12	4	8	:	H	:	:	:	:	:	:	:	241
Ост.	75	53	91	44	3	4	-	H	:	:	:	:	:	:	:	:	197
May. June. July. Aug. Sept.	64	58	9I	30	7	61	c		:	:	:	:	:	:	:	:	180
Aug.	98	48	81	45	, 81	, 9	н	:	:	:	:	:	н	:	:	:	223
July.	62	49	55	31	10	8	:	н	:	Ø	:	:	:	:	:	:	961
JUNE.	74	89	01	38	13	4	н	:	:	:	н	:	:	:	н	:	210
	89	51	19	38	9 <b>1</b>	2	61	H	:	:	н	:	:	н	:	:	202
APR.	68	19	28	48	21	4	<u>е</u>	н	:	:	:	61	:	:	:	н	258
Mar.	93	43	56	73	23	Ŋ	61	н	н	:	:	:	н	:	:	:	268
FeB.	86	57	21	75	28	64	4	н	-	н	:	:	:	:	:	:	288
Jan.	75	63	25	69	23	9	н	:	:	:	:	н	:	:	:	:	263
	Nominal or less than \$10	Between \$10 and \$50	50 " 100	ocoʻi ", coi ",	", I,000 ', 5,000	600,01 ,, 000,5 ,,	,, 10,000 ,, 20,000,	20,000 " 30,000 "	30,000 " 40,000…	,,, 40,000 ,, 50,000,	50,000 ,, 00000 ,,	60,000 " 70,000	70,000 '' 80,000	80,000 " 90,000 "	,, 100,000 ' 125,000	Over 1,000,000	Total

Origin of Fires by Districts and Months.

First District—Part of City lying South of Chambers Street.

		Total.	\$10,160	58,311	102,770	80,219	136,494	25,655	11,320	83,810	11,395	13,553	18,020	83,057	#631,764	35 fire 22	24
	Loss.	Contents,	\$7,850	46,956	91,265	65,492	112,834	24,025	10,405	72,840	705	11,778	15,410	72,087	\$531,647	o each fire, ces to each	each fire
		.egniblina	\$2,310	11,355	11,505	14,727	23,660	1,630	915	0/6,01	10,690	1,775	2,610	0/6,01	\$103,117	Number of dwellings to each fire	Number of buildings to each fire
	FIRES.	Total.	- 61	32	22	17	17	13	12	17	14	13	91	25	217	er of	er of
J	F FI	Other Places.	0	:	н	:	н	:	н	3	н	8	н	н	I3	dumb dumb	Jumb
1	NUMBER OF	Business.	41	27	17	14	14 14	10	II	13	01	6	14	23	9/1		
	Now	Dwellings,	<u>س</u>	ν.	4	co	73	8	:	н	3	0	н	н	28	. 176	. 204
	us.	Total.	00	17	13	9	II	Ŋ	6	∞	9	72	8	14	ro4	Jings	
	ANEO	Other Places.	0	:	:	:	:	:	н	н	:	н	:	-	9	gss buile	gs
,	MISCELLANEOUS.	Business.	52	14	10	9	II	Ŋ	∞	7	2	3	69	13	%	wellin	uildir
	Mıs	Dwellings.	Н	n	ю	:	:	:	:	:	H	н	:	:	6	in d in bu	s in b
0	G AND	Total.	25	Ŋ	ις	7	81	3	H	70	4	4	4	8	47	Number of fires in dwellings 28 Number of fires in business buildings. 176	Total fires in buildings 204
,	MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	н	:	:	:	:	I	ı	н	ı	:	70	umber	To
,	ANUFAC FHER F	Business.	5	ν	4	7	0	3	н	4	8	ю	3	8	41		
	In M.	Dwellings.	:	:	:	:	:	:	:	:	н	:	:	:	н	185)— . r,012 . 3,805	4,817
	ING.	Total.	0	25	3	8	3	4	0	4	3	ю	7	7	55	in 18	
	In Illuminating.	Other Places.	:	:	11	:	н	:	:	H	:	:	:	:	64	ation	
	LLUM	Business,	0	4	0	н	н	69	01	01	0)	81	7	7	34	umer	
	InI	Dwellings.	:	н	I	н	H	01	:	н	н	I	:	:	6	r en	
1	ri	Total,	4	5	н	8	н	н	:	:	н	H	m	0	21	as pe	:
	In Heating.	Other Places.	:	:	:	:	:	:	:	:	:		:	:		rict	
	HE,	Business	0	4	H	:	:	:	:	:	н	н	61	н	12	n dist	
	In	Dwellings.	8	н	:	01	н	4	:	:	:	:	н	н	6	ngs ii	÷
		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885).  Dwellings. 53.8	Total

		· Total.	\$2.040	480	1,290	2,890	coL	1,510	6,640	<b>%</b>	2,220	830	2,855	58,116	\$82,651	ire 30
	Loss.	Contents.	\$1,490	195	306	4,945	285	1,000	6,120	75	1,570	OII	2,255	27,6,8	\$46,598	Number of dwellings to each fire, Number of business places to each fire
		Buildings.	\$550	285	385	945	415	510	520	ι'n	. 650	720	009	30,468	#36,053	dwellings t ousiness pla
	RES.	Total.	12	∞	6	OI	9	6	7	4	9	∞	2	13	97	ocr of er of l
	NUMBER OF FIRES.	Other Places.	:	64	:	:	н	8	:	:	:	:	:	61	7	Yumb
	BER O	Pusiness.	4	н	3	3	н	3	ω	н	7	3	8	4	200	
	New	Dwellings.	000	'n	9	7	4	4	4	ю	4	ις	n	7	99	30
	us.	Total.	4	4	4	4	ω	69	Ŋ	С	:	н	н	∞	39	Iding
Ì	MISCELLANEOUS.	Other Places.	:	-	:	:	:	:	:	:	:	:	:	ı	0	igs
	CELL	Business.	m	н	81	n	н	<b>—</b>	3	н	:	н	1	m	30	wellir Isines
	Mıs	Dwellings.	"	8	61	н	8	н	8	8	:	:	:	4	17	in dr in bu
	AND S.	Total.	:	:	:	:	-	4	:	:	н	8	:	<b>.</b>	6	of fires
	TURING	Other Places.	:	:	:	:	н	8	:	:	:	:	:	:	m	Number of fires in dwellings Number of fires in business buildings
	Manufacturing and Other Business.	Business.	:	:	:	:	:	81	:	:	н	8	:	н	9	
	In M.	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	85)—
	I'NG.	Total.	4	01	0	6	н	'n	73	н	4	0	0	8	27	in 18
-	INAT	Other Places.	:	н	:	:	:	:	:	:	:	:	:	н	0	ttion
	In Illuminating.	Business.	н	:	:	:	:	:	:	:	н	:	н	:	6	mera
-	In I	Dwellings.	3	н	8	8	н		8	н	3	8	н	н	22	r enu
-	.;	Total.	4	8	3	4	H	:	:	:	н	0	81	8	75	as pe
	In HEATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	rict (
١	HE.	Business.	:	:	I	:	:	-:	:	:	:	:	:	:	н	dist
ı	I	Dwellings.	4	8	8	4	н	:	:	:	н	3	8	8	21	ngs ir
		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings  Business

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Third District - Between Chambers and Houston Streets, West Broadway and South Fifth Avenue, and Crosby, Elm and CentreStreets.

ose.	Total.	\$73,125	330	40,350	13,012	16,'00	5,450	3,950	12,255	1,185		30,773	63,635	\$260,665	83 fire 18	
Loss.	Contents.	\$56,650	COI	38,525	10,105	15,125	4,700	3,350	11,155	1,035	:	24,848	58,495	\$234,088	Number of dwellings to each fire Number of business places to each fire	Number of buildings to each fire
	Buildings.	\$6,475	230	1,825	2,907	1,475	750	009	1,100	150	:	5,925	5,140	\$26,577	dwellings to	uildings to
RES.	Total.	9	7	Ŋ	6	7	7	4	9	4	н	∞	14	78	er of	er of l
F FI	Other Places.		:	:	:	:	:	:	:	н	:	:	н	0	rum rum	Jum
ER O	Business.	9	7	Ŋ	00	7	9	4	Ŋ	8	н	∞	12	72		
NUMBER OF FIRES.	Dwellings.	:	:	:	н	:	н	:	н	:	:	:	н	4	4 72	192
	Total.	0	4	4	4	Ŋ	3	н	4	:	н	4	01	24	dings	
INEO	Other Places,	:	:	:	:	:	:	:	:	:	:	:	н	-	gss	lings
MISCELLANEOUS.	Business.	0	4	4	4	Ŋ	m	н	m	:	н	4	6	04	vellin	build
Mrsc	Dwellings.	:	:	:	:	:	:	:	н	:	:	:	:	н	in dv in bu	es in
AND	Total.	:	:	:	н	н	н	1	8	н	:	0	:	6	Number of fires in dwellings	Total fires in buildings
MANUFACTURING OTHER BUSINESS.	Other Places,	:	:	:	:	:	:	:	:	:	:	:	:	:	imber o	L
NUFACT	Business.	:	:	:	-	ı	ı	н	8	н	:	Q	·	6		
IN MANUFACTURING AND OTHER BUSINESS.	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	85) — 333 1,303	1,636
- i	Total.	н	н	н	н	H	н	Ø	:	3	:	61	8	15	81 II	
NATI	Other Places.	:	:	:	:	:	:	:	:	۲	:	:	:	-	ution	
IN ILLUMINATING.	Business.	"	н	н		н	н	8	:	01	:	8	01	41	ımera	:
I'v I'r	Dwellings.	:	:	:	-:	:	:	:	:	:	:	:	:	:	r enu	
	Total.	3	01	:	ε.	:	01	:	:	:	:	:	8	12	as pe	
TING	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	rict (	
In HEATING.	Business.	m	01	:	(1)	:	-	:	:	:	:	:	ı	6	dist	
In	Dwellings.	:	:	:	н	:	1	:	:	:	:	:	ı	m	ngs ir	
	Момтнѕ.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings	Total.

	Total.	\$24,854	23,845	19,194	26,747	9,222	23,466	5,773	25,188	22,695	6,051	11,323	117,708	\$316,066	24 fire 11	61 ···
Loss.	Contents.	\$19,017	16,715	15,689	23,548	6,927	16,661	4,148	13,706	14,870	3,564	7,873	96,343	\$239.05I	Number of dwellings to each fire	Number of buildings to each fire
	Buildings.	\$5,837	7,130	3,505	3,193	2,295	6,805	1,625	11,482	7,825	2,487	3,450	21,365	\$77,005	dwellings to	buildings to
RES.	Total.	53	51	57	59	37	58	46	73	53	48	69	94	089	oer of	er of l
of Fi	Other Places.	:	:	:	4	:	:	62	4	:	н	01	н	4	Num	Vumb
NUMBER OF FIRES.	Business.	22	91	22	56	OI	81	91	20	25	23	92	24	248		
Nom	Dwellings.	31	35	35	29	27	04	88	49	28	24	41	51	418	418	999
us.	Total.	61	20	17	21	13	24	25	50	34	61	29	36	307	Iding	
MISCELLANEOUS.	Other Places.	:	:	:	н	:	:	8	3	:	Н	н	н	6	S. buil	
CELL,	Business.	6	7	7	II	4	ις	6	oi.	14	6	15	17	117	elling	lings
Mis	Dwellings.	l oi	13	OI	6	6	19	1 t	37	20	6	13	81	181	mp u	build
AND S.	Total.	9	I	7	OI.	n	II	2	n	4	7	7	64	99	f fires i	Total fires in buildings
Manufacturing and Other Business.	Other Places.	:	:	:	3	:	:	:	н	:	:	н	:	ν,	Number of fires in dwellings 418 Number of fires in business buildings 248	Total
VNUFAC	Business.	20	н	9	9	81	∞	4	81	4	7	Ŋ	6	522		
In M	Dwellings.	н	:	н	н	I	3	н	:	:	:	н	:	6	5)— 9,994 2 593	12,592
ING.	Total.	15	61	61	91	91	17	91	20	12	17	22	23	212	n 188	
In Illuminating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ion ii	
LLUM	Business.	5	61	9	9	61	4	33	00	9	9	4	н	53	nerat	
In I	Dwellings.	OI	17	13	OI	14	13	13	12	9	II	18	22	159	enur	
ri.	Total.	13	II	14	12	Ŋ	9	:	:	m	N	II	15	95	s per	
ATING	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ict (a	:
IN HEATING.	Business.	6	9	3	3	0	н	:	:	н	н	8	4	56	distri	
I Z	Dwellings.	OI	Ŋ	II	6	3	Ŋ	:	:	23	4	6	II	69	ss in	
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885) Dwellings. Business.	Total

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Fifth District—Part of City lying between Houston and Twenty-third Streets.

	Total.	\$27,029	43,086	24,4,1	12,489	26,056	52,036	110,259	28,767	12,040	13.058	52,195	108,078	\$514,534	fire 18
Loss,	Contents.	\$18,504	39,151	18,416	6,924	21,849	41,294	77,302	23,407	10,820	10,179	90.706	93.853	#412,405	Number of dwellings to each fire  Number of business places to each fire  Number of buildings to each fire
	Buildings.	\$8,525	3.935	6,025	5,565	4,207	15 742	32,9.7	2,360	1,220	2,879	1,489	14,225	\$102,129	dwellings to business pla buildings to
RES.	Total.	47	48	50	37	49	41	38	35	32	31	38	36	482	er of er of er of
F F11	Other Places.	н	0	:	н	н	0	:	4	01	:	01	:	15	lumb fumb
SER O	Business.	81	91	22	II	19	61	17	21	15	14	20	23	215	
NUMBER OF FIRES	Dwellings.	28	30	28	25	56	20	21	10	15	17	91	13	252	215
ş,	Total.	81	22	19	II	22	19	91	19	10	12	12	91	961	lings
INEO	Other Places.	:	:	:	н	н	н	:	8	н	:	н	:	1	gs
MISCELLANEOUS.	Business.	7	II	O.	3	OI	II	7	o I	4	6	9	01	86	rellin iness dings
Misc	Dwellings.	ä	II	6	7	11	7	6	7	20	3	2	9	91	in dv n bus buil
AND S.	Total.	9	4	10	4	'n	7	OI	6	∞	63	00	4	72	Number of fires in dwellings  Number of fires in business buildings.  Total fires in buildings
MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	:	:	:	н	:	н	н	:	I	:	4	imber o imber o Total
ANUFAC	Business.	70	3	20	4	25	25	7	∞	9	8	7	3	99	
I <sub>N</sub>	Dwellings.	-	н	:	:	:	I	c	:	н	:	:	н	∞	5)— 15,986 3,836 19,822
NG.	Total.	6	10	14	14	15	II	12	7	14	∞	ř3	12	139	1188
In Illuminating.	Other Places.	:	H	:	;	:	:	:	H	:	:	:	:	0	ii noi
LLUM	Business.	1	8	61	3	3	01	3	3	Ŋ	н	10	∞	38	nerat
In	Dwellings.	∞	7	12	II	12	6	6		6	7	∞	4	93	enur
(5	Total.	14	12	12	∞	7	4	:	:	:	6	70	4	75	s per
IN HEATING.	Other Places.	-	н	:	:	:	:	:	:	:	:	:	:	1 0	ict (a
HE	Business.	50	:	75	н	н	H	:	:	:	8	0	N	16 I	distr
I Z	Dwellings.	~	11	7	7	9	3	:	:	:	7	n	N	54	in See
	Months.	January	February	March	April	May	June	July	August,	September	October	November	December	Total	Number of buildings in district (as per cnumeration in 1885)—  Business.  Total.

Sixth District—Part of City lying between Twenty-third and Fifty-ninth Streets.

	Total.	\$37,663	128,294	57,104	30,258	13,070	123,5'0	13,376	25,008	7777	4,920	4,827	49,946	\$497,713	fire 21
Loss.	Contents.	\$27,888	79,527	37,999	17,676	10,805	82,370	9,710	15,713	5,2,2	3,360	1,662	37,296	\$329,298	Number of dwellings to each fire Number of business places to each fire Number of buildings to each fire
	Buildings.	\$9,775	48,767	19,105	12,592	2,265	41,190	3,666	11,195	2,485	1,560	3,165	12,650	\$168,415	dwellings to business pla buildings to
ž Š	Total.	99	92	5.5	71	43	45	49	54	33	45	46	%	689	er of er of er of
F Fu	Other Places.	<u>س</u>	:	н	61	3	4	:	н	:	н	н	ın	21	Jumb Jumb
NUMBER OF FIRES.	Business.	61	22	15	20	oI	15	21	92	61	13	17	24	221	
Novi	Dwellings.	44	54	40	46	30	56	28	27	50	31	28	19	438	438 221 251 659
J. S.	Total,	25.2	22	22	12	10	17	25		17	19	17	33	256	lings.
MISCELLANEOUS.	Other Places.	01	:	н	-	н	0	:	:	:	:	н	8	OI	gs build
CELL	Business.	00	7	∞	7	7	9	6	14	∞	2	9	6	89	rellinginess
Mis	Dwellings.	151	15	13	13	7	6	91	14 -	6	14	Io	22	157	in dw n bus
S. AND	Total.	∞	6	8	∞	∞	6	∞	11	9	9	3	ν	83	Number of fires in dwellings 438 Number of fires in business buildings. 221 Total fires in buildings 659
MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	:	:	I	:	:	н	:	н	:	I	4	imber o
ANUFAC THER I	Business.	7	∞	61	7	ν.	∞	7	6	9	22	81	3	69	
I <sub>N</sub> M	Dwellings.	H	н	:	H	8	H	I	H	:	:	н	H	OI	22,274 4,585 36,859
ING.	Total.	15	17	16	56	91	15	91	15	11	II	11	30	661	18 I I I I I I I I I I I I I I I I I I I
IN ILLUMINATING.	Other Places.	"	:	:	н	-	8	:	:	:	:	:	81	7	tion
ורדמו	Business.	0	4	4	S	33	:	2	n	n	8	9	6	46	mera
Z	Dwellings.	12	13	12	20	12	13	II	12	∞	6	25	19	146	enn
1 6	Total.	18	28	ıe	91	6	4	:	:	5	6	15	22	142	is per
In HEATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ict (a
HE	Business,	0	3	H	I	:	I	:	:	01	н	m	m	17	distr
Z	Dwellings.	91	2.5	15	15	6	3	:	:	3	00	12	19	125	ni sg in
	Months.	lanuary	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings.  Business.  Total.

Seventh District-Part of City lying between Fifty-muth and One Hundred and Tenth Streets, West of Fifth Avenue.

11		#I45	4,535	1,215	1,432,045	877	255	155	:		r,945	47	1,237	2,457	62 73	65
	Total.				1,43				:	:				\$1,442,457		
Lo.s.	Contents.	\$8\$	1,395	1,015	957,669	217	235	105	:		1,650	22	447	\$962,835	o each fire	o each fir <b>e</b>
	Buildings.	\$65	3,140	200	474,377	099	50	50	:	:	295	25	290	\$479,622	Number of dwellings to each fire	Number of buildings to each fire
RES.	Total.	ю	6	3	4	9	4	c	:	н	70	∞	II	57	ber of	er of
F FI	Other Places,	:	:	:	н	:	:	:	:	н	7	:	:	3	Z cm Z	Num
SER C	Business.	н	8	н	8	8	н	н	:	:	н	н	8	14 T		
NUMBER OF FIRES.	Dwellings.	N	7	Ø	н	4	c,	8	:	:	n	7	6	40	. 40 5. I4	. 54
us.	Total.	8	3	н	8	8	:	н	:	н	3	8	۳,	21	Iding	
MISCELLANEOUS,	Other Places,	:	:	:	:	:	:	:	:	н	н	:	:	0	gss	ings.
CELL	Business.	:	:	н	01	Н	:	н	:	:	н	н	:	7	rellin	build
Mıs	Dwellings.	8	33	:	н	н	:	:	:	:	н	н	3	12	in dv in bu	s in
S. AND	Total.	н	н	:	:	:,	:	:	:	:	:	8	:	4	Number of fires in dwellings Number of fires in business buildings.	Total fires in buildings
IN MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:		umber	To
ANUFAC	Business.	ı	н	:	:	:	:	:	:	:	:	:	:	0		
In M.	Dwellings.	:	:	:	:	:	:	:	:	:	:	01	:	0	35)— 2,493 1,021	3,514
ing.	Total.	:	3	н	:	C.	3	8	:	:	:	33	9	2 1	ın 188	
INAT	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	tion	
In Illuminating.	Business.	:	н	:	:	:	н	:	:	:	:	:	61	4	mera	
In	Dwellings.	:	8	н	:	ω	01	8	:	:	:	c	4	17	r enu	•
15	Total.	:	8	н	н	н	н	:	:	:	8	н	8	II	as pe	
ATING	Other Places.	:	:	:	н	:	:	:	:	:	:	:	:	н	rict (	
In Heating.	Business.	:	:	:	:	۳	:	:	:	:	:	:	:	н	dist	Fotal.
ll z	Dwellings.	:	64	н	:	:	н	:	:	:	73	н	N	6	ngs in	:-
	Монтня.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1883)— 2,4 Business.	Tota

Eighth District-Part of City lying between Fifty-ninth and One Hundred and Tenth Streets, East of Fifth Avenue.

m:	1	5	4	22	7	2	25	4	25	9	62	12	61	06	ř.
	Total.	\$10,195	6,564	5,902	71717	66,662	5,315	1,934	3,015	936	56,029	4,172	25,919	\$158,390	ire. 23
Loss.	Contents.	\$7,695	3,697	2,752	1,270	46,010	3,965	1,414	2,230	620	21,405	2,625	5,499	\$99,182	each fire.
	Buildings.	\$2,500	2,867	3,150	447	20,652	1,350	520	785	346	4,624	1,547	20,420	\$59,208	Number of dwellings to each fire Number of business places to each fire Number of buildings to each fire
IRES.	Total.	37	30	32	61	12	14	19	14	61	23	56	61	264	per of per of b
F F	Other Places.	3	н	н	:	:	:	:	:	н	:	:	:	9	z um]
BR O	Business.	00	4	6	- 73	3	4	∞	2	4	9	9	4	63	
NUMBER OF FIRES.	Dwellings.	92	25	22	17	6	10	II	6	14	17	50	15	195	195 S. 03
Š.	Total.	13	18	13	7	2	6	II	OI	4	14	13	2	122	lings
MISCELLANEOUS.	Other Places.	10	ı	:	:	:	:	:	:	:	:	:	:	3	S.sbuild
ELLA	Business.	(9	3		н	03	8	0	ю	н	c	4	н	28	elling iness inldm
Misc	Dwellings	6	14	OI	9	т	7	∞	7	3	II	6	4	16	n dw n bus n bus
AND	Total.	N	н	н	:	:	8	8	81	ιν	0	ı	. 01	50	Number of fires in dwellings Number of fires in business buildings. Total fires in buildings
FURING	Other Places.	:	:	:	:	:	:	:	:	н	:	:	:	н	imber o imber o Tot
MANUFACTURING AND OTHER BUSINESS.	Business.	н	:	н	:	:	8	8	8	H	01	н	8	14	<del>.</del>
In MA OT	Dwellings.		н	:	:	:	:	:	:	m	:	:.	:	20	eration in 1885)— 9,689 1,454 11,143
NG.	Total.	15	9	14	00	5	61	9	01	6	2	7	6	88	1885)
INATI	Other Places.	:	:	н	:	:	:	:	:	:	:	:	:	н	u uo
IN ILLUMINATING.	Business.	<u>س</u>	:	3	Н	н	:	n	:	64	н	н	н	91	nerati
In	Dwellings.	12	9	Io	7	4	8	co	8	7	4	9	∞	71	enun
rá	Total.	1	25	4	4	8	н	:	:	н	61	2	n	34	s per
In HEATING.	Other Places.	н	:	:	:	:	:	:	:	:	:	:	:	н	ict (a
HE	Business.	N	н	01	:	:	:	:	:	:	:	:	:	72	distr
Z	Dwellings.	4	4	8	4	8	н	:	:	н	0	2	3	800	gs in
	Момпнs.	lanuary	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (asper enumeration in 1885)  Business.  Total.

Ninth District—Part of City lying between One Hundred and Tenth Street and Harlem River, West of Eighth Avenue.

	Total.	\$4,000	2,160	:	5.855	3,407	565	75	5	279	ις	605	:	\$16,956	fire 142 — 93 · · · · 93
Loss.	Contents.	\$3,500	1,718	:	150	3,005	540	9	:	526	:	:	:	\$9,202	Number of dwellings to each fire 124 Number of business places to each fire 142 Number of buildings to each fire 93
	Buildings.	\$500	412	:	5,705	402	25	15	70	50	ις	605	:	\$7,754	dwellings to ousiness pla buildings to
RES.	Total.	н	4	н	9	c,	4	ю	3	3	co.	7	:	37	er of ser of l
NUMBER OF FIRES.	Other Places.	:	:	н	c,	н	8	:	:	:	:	4	:	=	Numh Numh Numh
BER C	Business.	, :	н	:	8	н	:	01	8	n	:	:	:	H	
Num	Dwellings.	н	3	:	н	н	61	н	н	:	8	က	:	1.5	5 11 5 11 5 11 26 .
US.	Total.	:	н	:	3	н	н	3	61	3	н	3	:	18	ilding
MISCELLANEOUS,	Other Places.	:	:	:	8	:	н	:	:	:	:	н	:	4	ngs ss bu
CELL	Business.	:	:	:	н	:	:	8	01	3	:	:	:	00	lwell: usine uildii
Mrs	Dwellings.	:	н	:	:	-	:	н	:	:	н	C4	:	9	s in d in b d ii d ii s in b
AND S.	Total.	:	:	I	64	. 61	н	:	:	:	:	m	:	6	Number of fires in dwellings  Number of fires in business buildings  Total fires in buildings
TURING	Other Places.	:	:	1	н	н	H	:	:	:	:	ĸ	:	7	umber umber To
MANUFACTURING AND OTHER BUSINESS.	Business.	:	:	:	н	н	:	:	:	:	:	:	:	01	
In M.	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	85)— 1,862 1,560 3,422
ING.	T'otal.	:	н	:	н	:	-н	:	н	:	н	:	:	20	in 188
In Illuminating,	Other Places.	:	:	:	:	:	:		:	:	:	:	:	:	ation
LLUM	Business.	:	н	:	:	:	:	:	:	:	:	:	:	н	merz
Z	Dwellings.	:	:	:	I	:	H	:	н	:	н	:	:	4	r enu
ri	Total.	I	0	:	:	:	I	:	:	:	:	I	:	5	as pe
ATING	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	rict (
In Heating.	Business.	:	:	:	:	:	:	:	:	:	:	:	:	:	dist
I Z	Dwellings.	H	.31	:	:	:	н	:	:	:	:	н	:	20	ngs ir
	Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)—  Dwellings Business. 1,5  Total. 3,4

Tenth District-Part of City lying between One Hundred and Tenth Street and Hariem River, East of Eighth Avenue.

	Total.	\$4,075	5,115	5,465	127.441	360	1,925	1,585	306	6,867	14,665	2,035	15,437	\$185,276	72 17
Loss,	Contents.	\$2,700	3,090	2,520	63,816	245	1,378	950	246	5,552	9,350	1,645	6,347	\$97.839	Number of dwellings to each fire Number of business places to each fire.  Number of buildings to each fire
	Buildings.	\$1,375	2,025	2,945	63,625	115	547	635	99	1,315	5,315	390	9,690	\$87,437	ellings to e siness place
ES.	Total.	13	14	23	14	15	II	01	14	9	7	14	81	159	of dw
NUMBER OF FIRES.	Other Places.	:	:	N	н	:	н	н	:	:	:	:	:	מו	umber imber
BER O	Business,	9	01	6	4	4	9	ıΩ	9	1	20	c	9	57	žž ž
NuM	Dwellings.	7	12	12	6	11	4	4	00	S	61	11	12	97	97 57
g ·	Total.	m	7	13	7	7	4	9	∞	3	8	N	·	70	
MISCELLANE US.	Other Places.	:	:	н	н	:	н	:	:	:	:	:	:	m	sildin.ss
CELL	Business.	63	:	22	3	3	3	3	(1)	н	01	(1)	н	27	llings less b,
Mıs	Dwellings.	н	7	7	8	4	:	8	9	01	:	3	4	04	dwe bu ir n bui
S. AND	Total.	0	H	4	:	н	O)	н	81	:	:	:	01	15	Number of fires in dwellines
MANUFACTURING AND OTHER BUSINESS.	Other Places.	:	:	н	:	:	:	:	:	:	:	:	:	н	nber of nber of Tota
INUFAC	Business.	н	н	co	:	I	01	н	81	:	:	:	8	13	ZZ
In M	Dwellings.	I	:	:	:	:	:	:	:	:	:	:	:	н	885)— 6,941 945 7,886
ING.	Total,	4	61	33	9	7.	3	33	4	n	3	22	7	48	ii ii 8
IN ILLUMINATING.	Other Places,	:	:	:	:	:	:	н	:	:	:	:	:	I	ation
LLUM	Business.	64	:	н	-	:	H	н	CI	:	01	н	61	13	umer
I z	Dwellings.	0	N	Ø	Ŋ	70	01	H	01	33	н	4	5	34	er en
ı,	Total.	4	4	n	н	61	01	:	:	:	8	4	4	56	(as p
In HEATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	trict
HE	Business.	н	н	:	:	:	:	:	:	:	н	÷	н	4	in dis
1	Dwellings.	3	3	3	н	(1)	61	:	:	:	-	4	3	52	irgs
	Момтив.	January	February	March	April	May	June	July	August	September,	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)— Dwellings.  Business  Total.

Eleventh District—Part of City lying between Harlem and East Kivers, Kingsbridge Road, etc., and Bronx River.

Total fires in buildings .... 66 Number of buildings to each fire. .... 154

Total..... 10,173

-		Total.	\$265	:	:	525	:	:	:	1,000	:	15	:	i	\$1,805	1859
	ss.		\$220	:	·	25	:	:	:	400	:		:	:	\$645	h fire each fire h fire
	Loss.	Contents.	##	:	:		:	:		7	:			:	₹\$	to eac
		Buildings.	\$45	:	į	200	i	:	:	0009	:	15	:	:	\$1,160	Number of dwellings to each fire 159 Number of business places to each fire. 225 Number of buildings to each fire 185
	RES.	Total.	0	:	:	3	Н	:	:	н	:	63	:	:	6	ber of
	NUMBER OF FIRES.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	NZ Z E
	BER (	Business.	н	:	:	н	:	:	:	ı	:	:	:	:	m	9810
	Now	Dwellings.	н	:	:	61	н	:	:	:	:	01	:	:	9	
-	us.	Total.	H	:	:	н	:	:	:	н	:	:	:	:		lding
1	Miscellanbous.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ss bui
	CELL	Business.	:	:	:	н	:	:	:	н	:	:	:	:	0	lwell
ľ	Mis	Dwellings.	н	:	:	:	:	:	:	:	:	:	:	:	н	s in s s in bu
	G AND	Total.	н	:	:	:	:	:	:	:	:	:	:	:	н	Number of fires in dwellings Number of fires in business buildings. Total fires in buildings
ı	In Manufacturing and Other Business.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	Tumber Tumber
ĺ	ANUFAC THER I	Business.	н	:	:	:	:	:	:	:	:	:	:	:	п	
	In M O	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	85)— 945 674 1,619
	ING.	Total.	:	:	:	:	:	:	:	:	:	:	:	:	:	in 18
I	IN ILLUMINATING.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	ation
ı	LLUN	Business.	:	:	:	:	:	:	:	. :	:	:	:	:	:	ımerz
	INI	Dwellings.	:	:	:	:	:	:	:	:	:	:	:	:	:	er em
	ij	Total.	:	:	:	8	н	:	:	:	:	01	:	:	ν.	(as be
١	In Heating.	Other Places.	:	:	:	:	:	:	:	:	:	:	:	:	:	trict
1	N HE	Business.	:	:	:	٠	:	·:	:	:	:	:	:	:	:	in dis
1	=	Dwellings.	:	:	:	81	H	:	:	:	:	N	:	:	ν	ugs i
		Months.	January	February	March	April	May	June	July	August	September	October	November	December	Total	Number of buildings in district (as per enumeration in 1885)— Dwellings. Lusiness. Total.

Twelfth District-Part of City tying North of Spuyten Duyvil Creek and Kingsbridge Road, etc.

Th'ricenth District-Governor's, Bedloe's, Ellis's, Blackwell's, Ward's, Randall's and North Brother Islands.

Dwellings.   Dwe	Dwellings.   Dwe		1	In Heating.	ATIN	ij	InI	In Illuminating.	IINAT	ING.	In M.	MANUFACTURING AND OTHER BUSINESS.	TURING	S AND	Mist	MISCELLANEOUS.	ANEO	us.	Num	BER C	NUMBER OF FIRES.	RES.		Loss.	
V	Y.         I.         I.<	Months.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places,	Total.	Dwellings.	Business.	Other Places,	Total.	Dwellings.	Business.	Other Places.	Total.	Dwellings.	Business.	Other Places.	Total.	.eguiblica	Contents.	T'otal.
Y.         1	y.         y.<	January	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:			
0cr       1	ber of 1 ui'dings in district (as per enumeration in 1885)—  Number of fires in dwellings.  Number of fires in business buildings.  Number of business places to each fire	February	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	-	:	:
1       1	ber of uli dings in district (as per enumeration in 1885)—  Number of fires in business buildings. I Number of obstiness places to each fire	March	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	i	•
0cr       1	ber of uli dings in district (as per enumeration in 1885)—  Number of fires in business buildings. I Number of of university and survey and a series of a series o	April		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1   1   1   2   5   5   5   5   5   5   5   5   5	of 1 ui dings in district (as per enumeration in 1885)—  Of 1 ui dings in district (as per enumeration in 1885)—  Number of fires in business buildings. I Number of each fire siness places to each fire siness places to each fire siness places to each fire siness.	May	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	į	:	•
	of 1 ui'dings in district (as per enumeration in 1885)—  Of 1 ui'dings in district (as per enumeration in 18		:	:	:	:	:	:	:	:	н	:	:	п	1	:	:	н	8	:	:	N	\$325	coĵ#	\$233
1   1   1   1   1   1   1   1   1   1	of buildings in district (as per enumeration in 1888).—  Number of fires in dwellings.  Number of fires in business buildings.  Number of fires in business buildings.  Number of sires in business buildings.  Number of sires in business buildings.  Number of business places to each fire 7 p. 1 p. 2 p. 3 p. 2 p. 2 p. 2 p. 2 p. 2 p. 2	July	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	i	:	į
1   1   1   1   1   1   1   1   1   1	of fulfdings in district (as per counteration in 1888).—  Number of fires in dwellings.  Number of fires in business buildings.  Number of fires in business buildings.  Number of cach fire and business buildings.  Number of business places to each fire 7	August	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	•
1	1	:		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
1   1   1   1   1   1   1   1   1   1		ctober	:	:	:	:	:	:	:	:	:	:	:	:	:	н	:	н	:	-	:	H	700	150	850
		November	:	:	:	:	:	:	:	:	н	:	:	н	:	:	:	:	H	:	:	н	:	8	
2 1 1 2 3 1 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2       2   1   x     2   3   x     4   \$1,025   \$652         4   \$1,025   \$1,0	December		:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	i	:	÷
	Number of fires in dwellings 3   Number of fires in business buildings		1	:	:	:	:	:	:	:	0	:	:	0	н	H	:	0	3	+	:	4	\$1,025	\$652	\$1,677

Total fires in buildings.... 4 Number of buildings to each fire .... 112

Total..... 450

1	Total.	104	39	42	30-	961	256	21	122	81	70	33	co	01	1,213
ous.	Other Places.	9	8	н	6	7	oi	0	c	4	<sub>0</sub>	н	:	:	84
Miscellaneous.		68	50	40	117	 86	68	7	28	∞	27	15		н	-
Misci	Business.	00		4											541
	Dwellings.	6	17	I	181	16	157	12	16	9	40	17	1	H	624
UND	Total.	47	6	6	99	72	83	4	50	6	15	∞	I	03	345
MANUFACTURING AND OTHER BUSINESS.	Other Places.	10	3	:	v	4	4	:	н	7	I	8	:	:	32
MANUFACTURING OTHER BUSINESS.	Business.	41	9	6	52	9	69	81	±	61	13	Ŋ	ı	:	274
IN	Dwellings.	н	:	:	6	∞	IO	2	25	:	н	н	:	0	39
	T'otal.	45	27	15	212	139	(6 <sub>1</sub>	21	88	25	48	12	:	:	811
INATING,	Other Places.	0	8	H	:	64	7	:	н	:	н	:	:	:	91
In Illuminating.	Business.	34	3	14	53	38	46	+	91	н	13	8	:	:	224
	Dwellings.	6	22	:	1.59	66	146	17	71	4	34	OI	:	:	571
	Total.	21	22	12	95	75	142	II	34	ห	56	17	Ŋ	:	465
ATING.	Other Places.	:	:	:	:	61	:	н	н	:	:	н	:	:	າດ
IN HEATING.	Business.	12	н	6	92	61	17	н	25	:	4	4	:	:	86
	Dwellings.	6	21	æ	69	54	125	6	28	'n	22	12	25	:	362
	DISTRICTS.	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Total

	.latoT	\$634,764	82,651	263,665	316,066	514.534	497,713	1,442,457	158,390	16,956	185,276	29,823	1,805	1,677	\$4,142,777
Loss.	Contents.	\$531,647	46,598	234,083	239,061	412,405	329,298	962,835	99,182	9,202	97,839	15,109	645	652	\$2,979,56
	Buildings.	\$113,117	36,053	26,577	77,005	102,129	168,415	479,622	59,208	7,754	87,437	13,714	1,160	1,025	\$1,163,216
MBER TO	Total.	24	38	22	61	43	40	65	43	93	51	154	180	112	39
AVERAGE NUMBER OF BUILDINGS TO EACH FIRE.	Business, etc.	22	30	18	=	18	21	73	23	142	17	122	225	231	22
AVER OF E	Dwellings.	36	42	83	24	63	51	62	50	124	72	175	159	73	51
olnGS.	Total.	4,817	3,420	1,636	12,592	19,822	26,859	3,514	11,143	3,422	7,886	10,173	1,619	450	107,353
NUMBER OF BUILDINGS.	Business, etc.	3,805	902	1,303	2.598	3,836	4,585	1,021	1,454	1,560	945	3,184	674	231	25,098
Numbi	Dy ellings.	1,012	2,518	333	9,994	15,986	22,274	2,493	689,6	1,862	6,941	686'9	945	219	81,255
	Total.	217	46	78	089	482	089	57	264	37	159	70	6	4	2,834
FIRES	Other Places.	13	7	61	14	15	21	3	9	II	S	4	:	:	IOI
NUMBER OF FIRES.	Business.	176	30	72	248	215	221	14	63	11	57	98	e	ı	1,137
Ż	Dwellings.	28	,8	4	418	252	438	04	195	15	26	40	9	es	1,596
	DISTRICTS.	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth	Total

calls at various times for six engine companies. The fire-boat "Havemeyer," the police-boat "Patrol," the Charities and Correction boat "Thomas S. Brennan," as well as a number of railway company tugs known to be provided with firepumps were summoned. The building in which the fire originated stood at the only entrance to the grounds occupied by the New York Central Railroad Company, extending from Fifty-ninth to Seventieth street, and from Eleventh avenue to the river, a width of one thousand feet. Within these limits were two immense grain elevators, designated as A and B, and four covered piers, two stories high, about one hundred by five hundred feet in area, used for freight storehouses. There were also coal sheds, trestles and pockets, stock yard cattle pens, a large round-house for locomotives, and a pier at the foot of Fifty-ninth street. The entire area is supplied with water by a six-inch pipe, having attached to it eight hydrants, used for all purposes, but supposed to furnish a sufficient supply for fire protection. In fact, however, one engine will exhaust about all the water that the pipe can furnish. There were three fireengines within the inclosure, one of which was attached to a hydrant while two used their suctions at the bulkhead. Elevator A was three hundred and fifty-four feet long, one hundred feet wide and one hundred and fifty feet high. Elevator B was three hundred and twenty-six feet long, seventy-six feet wide, and one hundred and thirty-one feet high, and, both together, contained at the time one hundred and thirteen thousand bushels of grain.

The wind was blowing from the southeast and carried the intense heat from the burning lard building in the direction of the Fifty-ninth street cattle pier and Elevator A, which latter soon took fire at the peak of the roof, where it was impossible to reach it. The heat from the fire in this building, in like manner, communicated to Elevator B, and from Elevator B to the storehouse on Pier D. At this point a stubborn fight was made by the fire-extinguishing force, but, as it was exposed

for its entire length on the south to the fire raging in Elevator B, it was communicated to the under part of the pier and compelled the temporary retirement of the firemen therefrom. The force was then concentrated on the next pier and, after a very desperate struggle, it was checked at that point by the force there engaged, consisting of three land engines, the fire-boat "Havemeyer," and the chartered boat "John Fuller," the Brooklyn Fire Department boat "Seth Low," and six or eight tugs. The Police boat "Patrol" did not respond to the call, and it is understood that it was out of service undergoing repairs. The Charities and Correction steamer "Thomas S. Brennan" was seen in the vicinity of the fire, but did not engage in the work of extinguishment, presumably because of its large wooden upper works, which renders it useless for fire service.

The fire was under control in about six hours from the time of its origin. During the fire the fire-boat "Havemeyer" (Engine 43), stopped work for want of steam, and the men in charge could not explain the reason, except that in adding fresh fuel the steam pressure suddenly dropped and it required some time to regain it. On the south and easterly sides, and where the fire originated at the Fifty-ninth street end, there were eleven engine companies at work, which prevented the fire from spreading in those directions. The fire-boat "Zophar Mills" (Engine 51), the most powerful fire-boat, was necessarily out of service undergoing repairs which had been ordered by the United States government inspectors.

It is upon record that to provide for just such emergencies the Board of Estimate and Apportionment has, for the last three years, been asked for an appropriation to build an additional boat, the necessity for which had been clearly and emphatically stated. These demands were, however, disregarded, and no appropriation was made for the purpose until last December, thus necessitating the postponement of repairs to both the "Mills" and "Havemeyer," and delaying the

preparations for building the new boat until the present time. The Department had to contend with many impediments in combating this fire. The buildings on fire were about one thousand feet from the fire hydrants, and very long lines of hose were therefore required to reach it, thus materially diminishing the supply of water at the pipes. The fact that none of the streets above Fifty-ninth street extend beyond Eleventh avenue, and that the entire space from there to the river was covered with cattle pens, railroad tracks and freight cars, made it impossible to use the force to advantage on the south side of the fire except as above stated, at Fifty-ninth street. If it had been possible to use more companies at the northern end of the fire, they would have been called; but as it was recognized that they would be of no service, it was not deemed proper to uncover more of the city, especially as another fire was burning in the lower part of the city, for which a second alarm had been sent at the time. The successful checking of the fire at the northern end was due mainly to the fire-boats, which were nevertheless compelled to abandon their positions several times because of the intense heat and smoke. The suggestion was made by the Chief of Department that, in the event of application to rebuild the burned structures, permission be withheld until bridges are built over the inclosures from Eleventh avenue to the river whereon water-pipes could be laid and hydrants thus be located in the vicinity of the buildings, and the apparatus of the Department be enabled to reach the same and be of some service in case of fire.

Upon this report the President made the following indorsement:

"From what I saw on the night of the fire and from a careful inspection of the burned district, since made, I am of the opinion that the forces of this Department were handled by Chief Shay with excellent judgment and to the very best advantage. The situation was such that the extinguishment of the conflagration had to depend almost entirely upon our fire-

boats. By reason of the non-action of former Boards of Apportionment this Department has been forced to keep both fire-boats in service much longer than it would otherwise have done. One of these boats was, at the time of the fire, necessarily out of service and was replaced by a hired boat, the best that could be obtained, but much inferior to the 'Zophar Mills' in power, while the other boat had been just returned from the repair yard, and, being partly new, did not act under the great strain as well as was expected.

"If the repeated and urgent requests of the Department, dating back to 1886, for an appropriation for an additional floating engine had been heeded when made, the amount of such appropriation would have been saved at this fire many times over in the decrease of loss which would undoubtedly have been the result.

"In accordance with the recommendation of the Chief of Department, directions should be given to the Superintendent of Buildings to immediately notify the Board of Fire Commissioners, upon receipt of any proposition to rebuild within the burned district the structures which formerly stood there, in order that, as a condition precedent to such rebuilding, the Commissioners may impose conditions calculated to make the premises easily accessible to the land forces of the Department."

The cause of the fire was not ascertained and the estimated loss was \$1,427,741.

June 14.—No 33 Norfolk street, a six-story brick tenement building, 25 x 80 feet, occupied by twenty-two families. The fire originated on the second floor and the first alarm therefor was received at 6.20 P.M. The first company (Engine 17), arrived in about two minutes after the alarm was received and found the fire extending up the stairway and over all the apartments to the roof. The building was provided with fire-escapes on both front and rear; but notwithstanding this, the bodies of a woman and a child (Mrs. Kelickman, aged 70, and Esther

Goldberg, aged 2), were found on the third floor after the fire was extinguished, having undoubtedly been overcome by the smoke and heat while endeavoring to escape before the arrival of the force. There was evidently a great delay in sending out the alarm, as Hook and Ladder 18, located in Attorney street, near Delancey, had received a verbal alarm and was preparing to respond when the telegraphic alarm was received, while the Chief of the Fourth Battalion reports that upon his arrival, but four minutes after the alarm, he found that the fire had extended throughout the entire building, from the second story to the roof. Subsequently second and third alarms were sent out. The services of seven engine and four hook and ladder companies were required to extinguish the fire, and it was under contro in about one hour. Three engine companies reported no water pressure on the hydrants used by them, and the reports of all the companies showed a very deficient supply of water. services of one of the companies were rendered entirely useless because of its failure to obtain water. The fire was caused by a kerosene-oil stove taking fire, and resulted in an estimated loss of \$8,950.

August 14.—No. 72 Warren street, a five-story brick building, 25 x 75 feet, occupied as a printing and lithographing establishment. The fire originated on the fifth floor, and damaged the building slightly. The first alarm was received at 3.30 A. M., and at 3.38 and 3.42 A. M., respectively, second and third alarms were sent out followed by special calls for two engine companies.

The fire required the services of nine engine and three hook and ladder companies and one water tower, and was under control in one hour. The cause was spontaneous combustion, and the estimated loss was \$70.275.

December 7.—Pier 39, North river, foot of Houston street, a two-story frame structure, 80 x 550 feet, occupied by the National Line Steamship Co. for storing merchandise, etc. The fire originated on the second floor, considerably damaging

the pier. The first alarm was received at 1.18 P. M., and at 1.29 and 1.40 P. M., respectively, second and third alarms were sent out. Special calls were sent for two hook and ladder companies, and the services of twelve engines (including both the floating engines and five hook and ladder companies) were required, and the fire was under control in two hours. Four of the employees working on the pier were overcome by heat and smoke, and died from suffocation before the arrival of the department force, while endeavoring to extinguish the fire, the alarm for which was not promptly sent out. The estimated loss was \$55,868, and the cause was not ascertained.

December 8.—No. 36 East Fourteenth street, a five-story brick building, 40 x 100 feet, occupied by stationers and dealers in silverware, etc. The fire originated in the basement and extended throughout the building, by stairways and elevator, damaging it considerably. The first alarm was received at 10.18 A. M., and on the arrival of the first part of the force the fire was found coming out of all of the windows from the first to fifth floors on the south end of the building. At 10.20 and 10.21 A. M., respectively, second and third alarms were sent out; special calls were also sent out for six engine companies. The fire required the services of fourteen engine and three hook and ladder companies and one water tower and was under control in one hour. The estimated loss was \$88,800, and the cause was imperfect insulation of electric-light wires on basement ceiling.

December 19.—South side of Seventy-first street, between . Madison and Fourth avenues, a four-story brick building, 200 x 50 feet, known as the Presbyterian Hospital. The fire originated over the fourth floor, and extended throughout the attic to the roof, considerably damaging the building. The first alarm was received at 7.48 o'clock P. M., and on the arrival of the first companies the fire was found to be issuing from all parts of the roof, showing that there was considerable delay in sending out the alarm, and the third alarm was

immediately sent out. Special calls were also sent out for six engine and one hook and ladder company. The fire required the services of thirteen engine and four hook and ladder companies, and was under control in two hours. The building was equipped with stand-pipes and hose connections on the east and west sides, for which the supply of water was received from two tanks located in the attic. The valve on the supply pipe, located near the tank, was shut off on the night of the fire, and no water could be obtained from this source, although needed at a time when the air registers throughout the building were discharging burning cinders from the fire in the attic and on the floors below in many of the wards. The estimated loss was \$25,000, and the cause of the fire was not ascertained.

December 31.—Nos. 129 and 131 Crosby street, a sevenstory brick building, 50 x 100 feet, occupied by manufacturers and dealers in novelties of various kinds, plush jewelry cases, typewriting machines, etc. The fire originated on the fifth floor, and extended by an extra open stairway and shute to the sixth and seventh floors, considerably damaging the building. It also extended to the adjoining building on Jersey street, through openings in party wall, made for sprinkler pipes and shafting. The first alarm was given at 9.45 o'clock P. M. by Fireman Wrenn, of Engine 20, who saw the light of the fire from the front of his company's quarters. On the arrival of that company the fire had such headway that a second alarm was immediately sent out, and this was followed at 9.55 o'clock P. M. by a third alarm. Special calls were also sent out for four engine companies. The fire required the services of thirteen engine and four hook and ladder companies and one watertower, and was under control in one hour. The amount of the loss was estimated at \$70,500, and the cause of the fire was not ascertained.

# Water Consumption.

As nearly as can be estimated 16,821,750 gallons of water were used by the land engines of the Department in extinguishing fires, including the quantity taken from the rivers; and in addition thereto an estimated quantity of 14,913,000 gallons of river water was used by the two floating engines, making an aggregate of 31,734,750 gallons.

## Meritorious Services.

The following rescues at fires and elsewhere, involving personal risk, were reported and recorded on the Roll of Merit:

Fireman William Reilly, of Engine Company No. 24, rescued Mr. Enoch Wilkins, aged 65, from the roof of the burning building, No. 102 Barrow street, on April 11. Upon the arrival of the company at the scene of the fire, Fireman Reilly saw a person getting out of one of the dormer windows of the building and lie down on the eaves of the roof. Reilly quickly made his way to the roof through the adjoining house and crawled along the narrow eaves until he reached the person, who proved to be Mr. Wilkins, and assisted him along the eaves to the adjoining house, which by that time had become so much charged with smoke and hot air as to make it impossible for the policemen. on the floor below to render any assistance. Reilly then took Mr. Wilkins on his back and, with much difficulty finding the stairway, carried him safely to the street. It is considered that Fireman Reilly's courageous and prompt action was attended with unusual hazards, from the fact that there was no other way of reaching the person rescued than along the eaves, which were old and very insecure, and also because Mr. Wilkins was so much of an invalid as to be very helpless.

Fireman Patrick J. Brennan, of Engine Company No. 51 (floating engine "Zophar Mills"), rescued John Besch, a boy twelve years of age, and Fireman James McCleavey, of Hook and Ladder Company No. 8, rescued Joseph Stoderd, a boy fourteen years of age, from drowning at the foot of West Thir-

teenth street, on June 4. These rescues were accomplished by Firemen Brennan and McCleavey at the risk of their own lives by jumping overboard, the boys having been accidentally knocked off the pier and were struggling helplessly in the water.

Fireman Abraham Storm, of Engine Company No. 48, while on leave of absence on July 27, hearing a cry for help proceeding from the premises on the southwest corner of One Hundred and Seventy-third street and Webster avenue, immediately responded to it, and on arriving there found that James Sullivan, aged fifteen, had been suffocated by foul gases in a newly excavated well and that Patrick Doyle, aged twenty-eight (an employee of this Department), had met the same fate while endeavoring to rescue Sullivan. Fireman Storm, believing that they might still be alive, at the risk of his own life adjusted a rope around the bodies of Sullivan and Doyle, by means of which they were brought to the surface.

Fireman Thomas F. Freel, of Engine Company No. 43 (floating engine "William F. Havemeyer"), since promoted to be Assistant Foreman, on September 1, while the boat was lying at its pier at the foot of Clinton street, East river, hearing cries for help from Frederick Zanter, a man who had fallen off an adjoining pier and had been carried out by the strong tide about 200 feet, promptly jumped overboard to his rescue. After a long and exhaustive struggle Fireman Freel succeeded in reaching the boat with the man whom he had so heroically rescued at the risk of his own life.

Engineer of Steamer William Purdy of Engine Company No. 51 (floating engine "Zophar Mills") and Lineman Andrew Murray of the Fire Alarm Telegraph rescued a boy, John Cain, from drowning on November 20, under the following circumstances: The boy had fallen into the river from the pier at the foot of West Thirteenth street, at which the floating engine is moored, and he had been carried by the current under the pier when Lineman Murray jumped into the water and reaching

the boy caught hold of a pile but was powerless to do more. Engineer Purdy then jumped overboard, took the boy from Lineman Murray and swam with him to a scaling ladder and thence ascended to the pier.

# The Bennett and Stephenson Medals.

These medals were awarded for the past two years, as follows:

To Assistant Foreman Samuel Banta, of Hook and Ladder
Company No. 10, the Bennett Medal for the year 1887, for
meritorious services recorded in the report for that year, as
follows:

During the progress of a fire in the basement of No. 84 Park place, on January 22, Fireman 1st grade Francis J. Ouinn, who was directing his company's pipe on the stairway leading to the basement, was overcome by the heat and smoke and fell headlong into the cellar. Assistant Foreman Banta and Fireman 2d grade William Harrigan, of Hook and Ladder Company No. 10, and Fireman 1st grade James Rehill, of Hook and Ladder Company No. 8, in endeavoring to bring him up. were driven out by the smoke and flames. Under cover of two streams of water they again descended, and, although exhausted themselves, succeeded in bringing Fireman Ouinn up to the sidewalk. There being no windows or openings in the rear wall for the escape of the flame and smoke, the entrance from the front was extremely perilous, and but for the prompt and courageous action of Assistant Foreman Banta and Firemen Rehill and Harrigan, Fireman Quinn would have been suffocated.

To Foreman William Quirk, of Engine Company No. 49, the Bennett Medal for the year 1888, for meritorious services recorded in the report for that year, as follows:

Assistant Foreman William Quirk, of Engine Company No. 22, on March 19, at 6.53 A. M., at the fire which occurred in the five-story building, No. 38 East Eighty-fifth street, at the corner of Madison avenue, rescued three members of the Westlake family, under the following-described circumstances:

Assistant Foreman William Quirk (at the time commanding the company) himself took a scaling ladder, with it reached the fourth floor and placed it in a window of the fifth floor. Under his direction the two men (Frederick and Isaac Westlake) descended upon it to the fourth floor. At this time the flames burst out of all the windows of the third floor and prevented further descent by ladder. In the meantime Hook and Ladder Company No. 13 had arrived in response to the telegraphic (box) alarm, and as it was impossible to make use of its extension ladder in time, the life-saving net was resorted to, being held by the few available firemen, aided by a number of citizens. After Miss Westlake, who had been compelled to remain on the fifth floor, and her two brothers on the fourth floor, had, under Assistant Foreman Quirk's direction and instruction, successively jumped and been safely caught in the net, Assistant Foreman Quirk also jumped, and although caught in the net, he unfortunately bounded out of it, and falling upon the pavement broke an arm; the others sustained no injuries except those due to shock and slight burns. There can be no doubt that the lives of all would have been lost but for the prompt use of the life-saving net. Mrs. Westlake, the mother of the family, was killed by suffocation at the window of the fifth floor before she could be reached.

The Chief of Department stated in his report that the action of Assistant Foreman Quirk was one of the bravest and most meritorious that had ever been performed by a fireman in the service, and that notwithstanding the caution by Foreman Donohue (who attempted to follow him with a scaling ladder, and had to abandon it), to come down, as the flames were coming out of the windows beneath him and that his escape would thus be surely cut off, Quirk resolutely refused to abandon his undertaking to reach the imperiled persons above him.

The Commissioners adopted the following resolution, which explains itself:

"Resolved, That as a slight reward of the heroism displayed by Assistant Foreman William Quirk, of Engine 22, in

recently helping to save four lives at the risk of his own, and also as an additional evidence to the uniformed force that signal bravery will not be passed by unrecognized, the Fire Commissioners do hereby, subject to civil service examination, promote said William Quirk to the position of Foreman, and direct that upon his recovery from his injuries he be assigned to the command of Engine 49, on Blackwell's Island."

Having subsequently been duly examined and passed, Assistant Foreman Quirk was, in accordance with the resolution, promoted to the grade of Foreman on September 15.

To Foreman William McLaughlin, of Engine Company No. 24, and to Foreman Thomas A. Kenny of Engine Company No. 7, who were adjudged to be the most deserving among the company commanders, the Stephenson medal for the years 1887 and 1888, respectively, was awarded.

The presentation of these medals was made on the plaza, at Union Square, on the afternoon of May 4, in the presence of a large number of spectators. At the same time an exhibition drill of the Life Saving Corps was given, and the ceremonies were concluded with a review of a brigade of the Department paraded for the purpose.

# Life Saving Corps and School of Instruction.

The company drills and instruction commenced in 1883, as noted in the report for that year, were continued during the past year, and the instructor's rating at the close of the year was as follows:

First Class—Found proficient and active: Engine Companies Nos. 1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 20, 21, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 39, 41, 44, 54, 55 and 56. Second sections of Engine Companies Nos. 12 and 33. Hook and Ladder Companies Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 and 20.

Second Class—Found deficient: Engine Companies Nos. 2, 9, 17, 18, 19, 22, 23, 28, 35, 36, 37, 38, 40, 42, 45, 46, 47, 48,

50, 52 and 53. Hook and Ladder Company No. 19, and Engine Companies Nos. 48, 50 and 52 as Hook and Ladder Companies.

The Deputy Chief of Department in charge reports that these drills have been of great advantage to the service in thoroughly familiarizing the officers and men with the practical use of the various implements, and that observation of their practical work at fires has demonstrated the value of the instruction given. He concurs in the recommendation, made in another part of this report, that in view of the character of the immediate surroundings of the present drill yard, in rear of the Headquarters building, steps be taken to procure a location for this purpose on the river front where the supply of water for engine tests would be unlimited, and the annoyance now complained of by the neighborhood would be reduced to a minimum.

### Casualties.

The number of human lives lost and persons injured at fires, and in responding to alarms for fires, are reported as follows:

		Отн	IERS.	
	MEMBERS OF THE DEPARTMENT.	Before Arrival of Department.	o:	TOTAL.
Killed or fatally injured at fires		23	4	27
" responding to alarms				
Injured at fires	80	65	8	153
" responding to alarms	31	2		33
Aggregate	III	90	12	213

# Rope Fire-escapes in Hotels.

The Chief of Department's report of the semi-annual inspection of hotels in July, required by chapter 720, Laws of 1887, showed that 282 hotels were inspected, of which number 85 had not complied with the law. The report was duly forwarded to the Mayor.

Strength of Uniformed Force, Number of Fires, with Losses, Population, Number of Buildings, etc., from 1866 to 1889.

	Uni	RENGTH OF FORMED ORCE.	Fires.	.e.	oss by Fire.	lation, Census Years.	Inhabit- ach Fire-	Inhabit- ach Fire.	or Buildings.	Build- ich Fire.
YEAR.	No. of Companies.	No. of Officers and Men.	Number of Fires.	Loss by Fire.	Average Loss	Population, Census	Number of Inhabitants to each Fireman.	Number of Inhabit ants to each Fire	Number of	Number of Build- ings to each Fire.
1866	54	*964	796	\$6,428,000 00	\$8,075 38	† <del>7</del> 69,553	798	967	‡5 <b>4,00</b> 0	80
1867	54	*919	873	5,711,000 00	6,541 81					
1868	52	592	740	4,342,000 00	5,867 57					
1869	52	599	850	2,696,393 00	3,172 23					
1870	52	596	964	2,120,212 00	2,199 39	942,292	1,581	977	•••••	
1871	52	596	1,258	2,127,356 00	1,691 06					
1872	52	596	1,649	2,891,818 co	1,753 67					
1873	54	651	1,470	4,022,640 00	2,736 48		· · · · ·			
1874	64	§712	1,355	1,430,306 00	1,055 58					
1875	67	748	1,418	2,472,536 00	1,742 67	1,041,286	1,392	734	‡84,200	59
1876	63	747	1,382	3,851,213 00	2,786 70					
1877	65	752	1,450	3,210,695 00	2,214 27					
1878	65	727	1,654	1,884,505 00	1,139 36					
1879	64	729	1,551	5,671,580 00	3,656 72	•••••				
1880	65	748	1,783	3,183.440 со	1,785 44	1,206,299	1,613	676		
1881	66	769	1,785	5,820,259 00	3,260 55					
1882	67	826	2,001	4,195,960 00	2,096 43				1102,624	51
1883	63	895	2,169	3,512,848 00	1,619 37				1101,735	47
1884	70	919	2,405	3,474,547 00	1,444 12					
1885	71	927	2,479	3,789,283 00	1,528 55	•••••			104,250	42
1886	71	951	2,415	3,340,810 00	1,383 35					
1887	74	960	2,929	5,585,425 00	1,917 28			• • • •		
1888	74	1,040	3,217	5,485,922 00	1,705 29	¶1,676,140	1,612	521	**112,000	35
1889	76	1,039	2,836	4,142,777 00	1,460 78	¶1,755,510	1,690	619	**114,500	40
Т	otal,	24 years	41,430	\$91,391,525 00	\$2,205 92		••••			

<sup>†</sup> Estimate based on census of 1865.

<sup>\*</sup> Including about 400 volunteer firemen. † E Estimate based on report of Superintendent of Buildings. § Annexation of territory north and east of Harlem river. || As per enumeration. || As estimated by the publishers of the City Directory. \*\* As estimated by the Bureau of Inspection of Buildings.

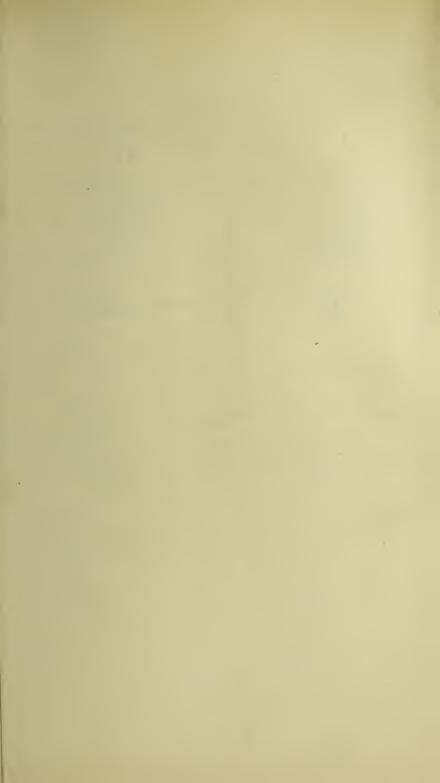
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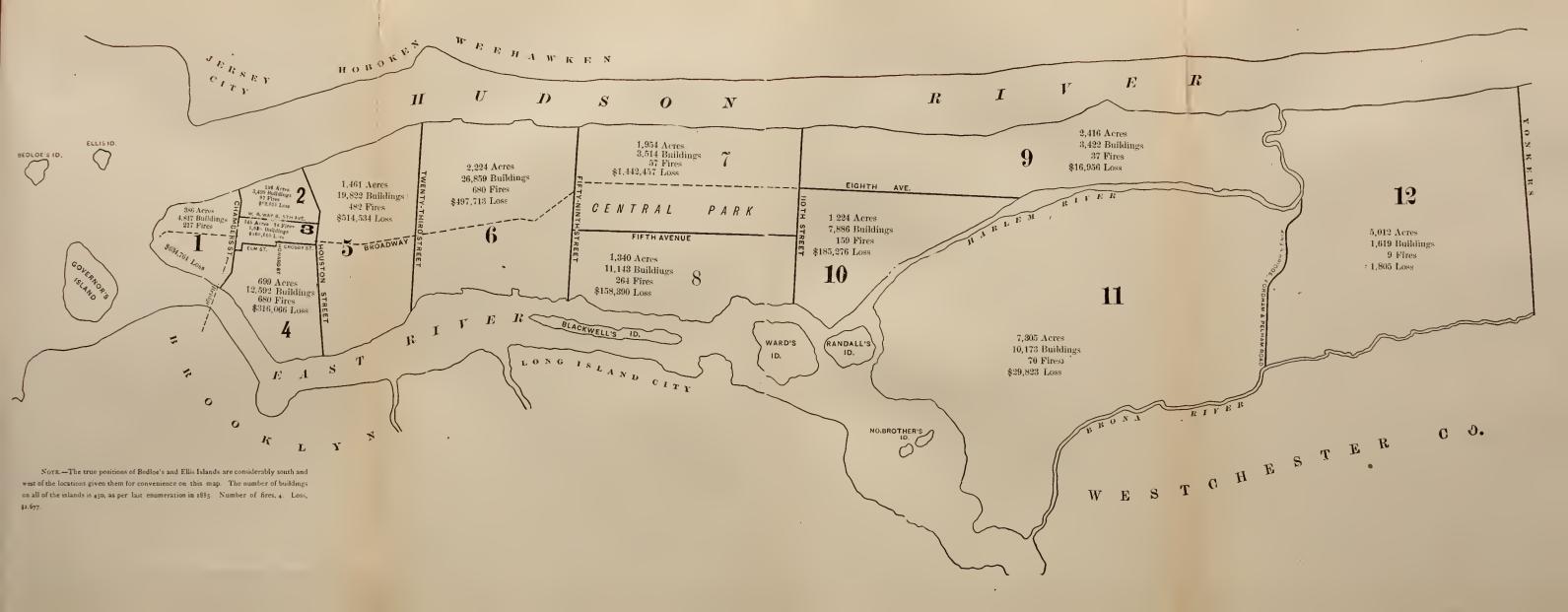
# BUREAU OF FIRE MARSHAL. Losses and Insurance.

	JANUARY.	FEBRUARY.	Макси.	APRIL.	May.	JUNE.	JULY.
Estimated loss—							
On buildings and vessels	\$38,083 00	\$81,711 00	\$52,180 00	\$584,639 00	co 960°09\$	\$70,194 oc	\$41,753 00
On contents	155,990 00	194,376 00	213,156 00	1,151,838 00	218,867 00	176,718 co	113,969 00
Total	\$194,073 00	\$276,087 00	\$255,336 co	\$1,736,477 oo	\$278,963 00	\$246,912 00	\$155,722 00
Estimated insurance—							
On buildings and vessels \$1,551,000 oo	co 000'155'1\$	\$2,200,450 co	00 000,176,1\$	\$3,276,550 00	\$1,786,100 00	\$370,800 00	\$1,289,455 00
On contents	774,410 00	905,453 00	1,145,225 00	3,993,321 co	r,378,540 oo	1,138 225 00	590,846 00
Total	£2,725,410 00	\$3,105,908 oo	\$3,117,225 00	\$7,269,871 00	\$3,165,040 00	\$2,109,025 00	\$1,880,301 oo
Estimated uninsured loss—							
On buildings and vessels	00 0/9\$	\$1,810 00	\$10,230 00	\$949 00	\$7,125 00	\$1,780 00	\$260 00
On contents	10,625 00	12,843 00	8,597 00	28,411 00	44,160 00	3,572 00	9,019 00
Total	\$11,295 00	\$14,653 oo	\$18,927 00	\$29,360 oo	\$51,285 00	\$5,352 00	\$9,279 00
Average loss per fire	\$737 92	\$958 63	\$990 05	\$6,730 53	\$1,379 67	\$1,175 77	\$795 or

Losses and Insurance—(Continued).

	AUGUST.	September.	Остовек.	November.	<b>Десемвек.</b>	YEAR.
Estimated loss—						
On buildings and vessels	\$41,597 00	\$25,531 oo	\$22,248 00	\$19,856 oo	\$125,328 00	\$1,153,216 00
On contents	139,777 co	45,293 00	63,339 00	107,058 00	398,180 00	2,979,561 00
Total	\$181,374 00	\$71,824 00	\$85,587 00	\$126,914 00	\$523,508 00	\$4,142,777 00
Estimated insurance—						
On buildings and vessels	\$1,637,200 00	\$1,115,190 00	\$932,200 00	\$1,227,400 00	\$2,338,200 00	\$20,695,545 00
On contents	810,675 00	279,791 00	294,545 00	1,480,245 00	2,212,685 00	15,005,366 00
Total	\$2,447,875 00	\$1,354,981 00	\$1,226,745 00	\$2,707,645 00 \$1,550,885 00	\$1,550,885 00	\$35,700,911 00
Estimated uninsured loss—						
On buildings and vessels	\$805 00	00 o61'1\$	\$2,715 00	\$1,197 oo	\$250 00	\$28,981 oo
On contents	3,171 00	6,284 00	4,519 00	1,072 00	8,357 00	140,730 00
Total	\$3,976 00	\$7,474 00	\$7,234 00	\$2,269 00	\$8,607 00	\$169,711 00
Average loss per fire	\$813.34	\$399 02	\$434 45	\$526 6r	\$169 99	\$1,46r 8r





Indictments, Convictions, etc., for Arson, Incendiarism, etc.

Name.         ge Sex.         Color.         Ni           Philip Heinrich         38         Male         White Geal           John Harris         37         " "         Pol           Philip Caplan         29         " "         " "	Nativity.		NATURE OF CHARGE AND CIRCUMSTANCES.	INDICTMENT AND	WHEN AND OF	
Sex. Sex. 37 "	Nativity.		CIRCUMSTANCES.		TO GIVE WELL TO	SENTENCE AND
58 Male	Gormany	Occupation.			WHAT CONVICTED.	Remarks.
37		Type-founder	White Germany Type-founder Setting fire to his premises	Arson, third de- agree. January		Bailed in \$5,000 by Judge Smyth,
62	Poland	Shoe dealer	ber 24-25, 1888	24, 1889) No indictment		Case pending. Dismissed by Grand Jury. In- sufficient evi-
	:	Dry goods	Setting free to premises No. 2908 Third avenue, on the night of Feb.	Arson, first de- gree, March	Tried May 28.	dence. December 3, 1889, discharged on his own recog-
Simon Sondowitch 23 "	:	:	Setting fire to premises No. 2908 Third avenue, on the night of February	Arson, first de-	Tried June 17. Jury disagreed	nizance. December 3, 1889, discharged on his own recog-
Max Silvermann 37 "	:	Shoe dealer	Setting fire to premises No.   625 Third avenue, on the night of February	Arson, first degree		nizance. Discharged August 8, 1889, by Judge Gildersleeve on his own
Mary Goss Female "Am	American	Domestic	Setting several fires in dwelling No. 350 Lenox davening, on and before April 25, 1889			recognizance. Sent to House of Refuge by Judge of Fith District Police Court. Committment
Joseph Quirk 12 Male,, "	*	None	Sctting several fires in dwelling No. 323 East One Hundred and Fourteenth street, on and before May 5, 1839]			paulit of iter mother, Committed to Catholic Pro- tectory by Judge of Fifth District Police Court on complaint of his father.

	SENTENCE AND REMARKS.					Bailed in \$2,000 by Judge Dono-hue.		Bailed in troco	Bailed in \$7,500.
	WHAT CONVICTED.						Tried and jury disagreed		Bailed in \$7,500.
NATURE OF	INDICTMENT AND DATE.	Arson, first degree, November 14,	Arson, first degree, November 14,	Arson, first degree, November 14,		Arson, first de- gree, May 11,	Arson, first de- gree. and lar- ceny, Febru-	Arson, second de- gree, September	Arson, first degree, February 21,
M.	INATURE OF CHARGE AND CIRCUMSTANCES,	Conspiring to fire and set- ting fire to premises No. 78 Norfolk street, on the night of October	Conspiring to fire and setting fire to premises No. 78 Norfolk street, on the	Conspiring to fire and setting fire to premises No. 78 Norfolk street, on the night of October 17,	1889	Firing premises No. 217 Sixth avenue, on May 5, 1882	Firing premises No. 151 Essex street, January	Firing premises No. 7 Frankfort street, August 4, 1887, and Sep-	Firing premises No.50 East Twenty-ninth street, February 3, 1888
	Occupation.	White Poland Hair-dresser.	÷	Tailor		Dressmaker	Tailor	Printer	Clerk
SON.	Color. Nativity.	Poland	*	:		Female White American	Russian	American	:
OF PER	Color.	White	;	*		White	:	:	:
DESCRIPTION OF PERSON.	Sex.	Male	Female	Male		Female	Male	:	:
DESC	Age.	35	33			40	30	1.8	88
	Name.	Henry Koch	Henrietta Koch	Max Lil schure 28	The following cases remain in the District Attorney's office awaiting final disposition:	Susan A. Howard	Joseph Coletta	William alias Fritz	John M. D. Fanshawe.

# BUREAU OF COMBUSTIBLES.

# Operations under the Laws Regulating the Storage of Combustibles and Explosive Materials, etc.

			of.			Disp	OSITIC	ON.		
COMPLAINTS OF VIOLATIONS, ETC.	Pending last Report.	Received since.	Total to be Disposed of.	Complied on Notice.	Unfounded.	Penalties Collected.	Penalties Remitted.	Prosecution Recommended.	Total.	Now pending.
Selling kerosene-oil below test		1	ı			1			1	
Silling kerosene-oil without license.		519	519	463	30			10	503	16
Chimney fires	20	176	195			80	101		181	15
Hoistways found open after con-		8	8			. 3			3	5
Fire-hydrants obstructed		12	12	II					11	ı
Lights unprotected	8		8	1					1	7
Want of fire-extinguishing appliances	5		5	3	2				5	
Combustible material in excessive	8	46	54	35	13				48	6
Kerosene or naphtha, etc., in ex-	2	19	21	8	11			ı	20	ı
Fireworks, chemicals, matches, etc., kept without permit	1	9	10	7	3				10	
Powder, etc., improperly stored, transported, etc		7	7	4	2		I		7	
Chimneys, flues, heating apparatus, etc., unsafe	73	23	101	51	5				56	45
Ashes in wooden boxes, etc	2		2	2				)	2	
Hay, straw, cotton, rags, and other vegetable fibre stored in excessive quantity		5	5	3	••	••			3	2
Totals	119	830	949	583	66	84	102	11	851	98

Special surveys made to determine the fitness of prem-	
ises for the storage of combustibles or explosive	
materials	940
Samples of kerosene oil collected and tested	6,337

Money Received for Licenses and Permits Issued, Penalties Collected, Sale of Explosives, etc., Seized, etc.

For 19 powder licenses issued, at \$2	For 4,172 kerosene-oil licenses issued, at \$10	\$41,720 00
For 11 wholesale fireworks permits issued, at \$20 For 162 retail fireworks permits issued, at \$5 For 63 kindling fire in street permits issued, at 50 cents	For 19 powder licenses issued, at \$2	38 00
For 162 retail fireworks permits issued, at \$5 810 00  For 63 kindling fire in street permits issued, at 50 cents 31 50  For 32 powder licenses issued at \$5 160 00  For 3 permits to keep and use explosives in main magazines, at \$25 75 00  For 78 permits to keep and use explosives in hand magazines, at \$10 780 00  For 3 permits to keep and sell explosives, at \$25. 75 00  For 7 permits to transport explosives, at \$1 7 00  Total for licenses and permits \$45,414 50  For I penalty for selling kerosene-oil below test, at \$50 \$50 00  For 80 penalties for chimney fires, at \$5 400 00  For 3 hoistways left open, at \$50 150 00  Total for penalties 600 00  For sale of powder seized 25 00	For 749 special permits issued, at \$2	1,498 00
For 63 kindling fire in street permits issued, at 50 cents	For 11 wholesale fireworks permits issued, at \$20	220 00
For 32 powder licenses issued at \$5	For 162 retail fireworks permits issued, at \$5	810 00
For 32 powder licenses issued at \$5	For 63 kindling fire in street permits issued, at	
For 3 permits to keep and use explosives in main magazines, at \$25	50 cents	31 50
magazines, at \$25	For 32 powder licenses issued at \$5	160 00
For 78 permits to keep and use explosives in hand magazines, at \$10	For 3 permits to keep and use explosives in main	
hand magazines, at \$10	magazines, at \$25	75 00
For 3 permits to keep and sell explosives, at \$25.  For 7 permits to transport explosives, at \$1 7 00  Total for licenses and permits \$45,414 50  For I penalty for selling kerosene-oil below test, at \$50 \$50 00  For 80 penalties for chimney fires, at \$5 400 00  For 3 hoistways left open, at \$50 150 00  Total for penalties 600 00  For sale of powder seized 25 00  Total received and turned over to the	For 78 permits to keep and use explosives in	
For 7 permits to transport explosives, at \$1 7 00  Total for licenses and permits \$45,414 50  For I penalty for selling kerosene-oil below test, at \$50 \$50 00  For 80 penalties for chimney fires, at \$5 400 00  For 3 hoistways left open, at \$50 150 00  Total for penalties 600 00  For sale of powder seized 25 00  Total received and turned over to the	hand magazines, at \$10	780 00
Total for licenses and permits \$45,414 50  For I penalty for selling kerosene-oil below test, at \$50 \$50 00  For 80 penalties for chimney fires, at \$5 400 00  For 3 hoistways left open, at \$50 I 50 00  Total for penalties	For 3 permits to keep and sell explosives, at \$25.	75 00
For I penalty for selling kerosene-oil below test, at \$50	For 7 permits to transport explosives at \$1	7 00
For I penalty for selling kerosene-oil below test, at \$50	or, permits to transport explosives, at \$1	, 00
below test, at \$50	-	
For 80 penalties for chimney fires, at \$5 400 00 For 3 hoistways left open, at \$50 150 00  Total for penalties	-	
For 3 hoistways left open, at \$50 150 00  Total for penalties 600 00  For sale of powder seized 25 00  Total received and turned over to the	Total for licenses and permits	
Total for penalties	Total for licenses and permits For I penalty for selling kerosene-oil	
For sale of powder seized	Total for licenses and permits	
For sale of powder seized	Total for licenses and permits	
Total received and turned over to the	Total for licenses and permits	
	Total for licenses and permits	\$45,414 50
	Total for licenses and permits	\$45,414 50
Relief Fund \$46.030 50	Total for licenses and permits	\$45,414 50
φ+0,039 30	Total for licenses and permits	\$45,414 50

The following regulations were established by the Board of Fire Commissioners, to govern the manufacture, transportation, sale, storage and use of explosives within the corporate limits of the City of New York, pursuant to the following provisions of law:

# (Chapter 410, Laws of 1882.)

- "§ 455. No person shall manufacture, have, keep, sell or give away any gunpowder, blasting powder, gun-cotton, nitroglycerine, dualin, or any explosive oils or compounds, within the corporate limits of the City of New York, except in the quantities limited, in the manner and upon the conditions herein provided, and under such regulations as the Board of Fire Commissioners shall prescribe. \* \* \* \* \* "
- "§ 456. No fireworks, detonating works, cartridges, powder train, percussion caps, collodion, nitrate of soda, nitrate of silver, ether, phosphorus, matches, or explosive compounds shall hereafter be manufactured, stored, or kept upon sale in the city, except at such places, in such manner, and in such quantities as shall be determined by the said Board in the exercise of their discretion, under a permit by them granted therefor, and subject to be revoked at any time by said Board. \* \* \* \* "

## ARTICLE FIRST.

#### EXPLANATORY NOTES.

- I.—The term "explosives" wherever used in these regulations is intended to comprise all explosive substances or preparations which are manufactured for or used in producing a practical effect by an explosion, or a pyrotechnic effect; and it includes also fuses and detonators, as well as every adaptation of an explosive as above defined.
- II.—The term "high-explosives" wherever used in these regulations is intended to comprise only such explosive substances and preparations as are more sudden and violent in their action and effect than gunpowder.

The most important and well known of these "high-explosives" are the following:

Nitro-glycerine, pure and simple.

Dynamites, with inexplosive base, like Dynamite or Giant Powder, No. 1.

Dynamites, with explosive base, like "Rendrock," "Vulcan Powder," "Atlas Powder," "Hercules Powder," "Dualin," and "Judson Powder."

Nitro-glycerine
Mixtures.

Explosive or blasting gelatine.

Gelatine dynamites, like some varieties of "Forcite."

Gun-cotton, pure and simple, or prepared as Tonite.

Picrates, such as "Designolle" powder and Picric powder.

Chlorates, like "Rackarock."

Sprengel's group of modern explosives, also called Pan-class-tites.

Fulminates of mercury and of other metals.

## ARTICLE SECOND.

QUALIFICATIONS AND EXAMINATION OF PERSONS EMPLOYED IN THE TRANSPORTATION, SALE, STORAGE AND USE OF EXPLOSIVES.

I.—All persons employed in the transportation, sale, storage and use of explosives shall be not less than twenty-one (21) years of age, of good habits, reliable and able to read the English language understandingly.

II.—All persons applying for permits under these regulations shall be examined, under the direction of the Inspector of Combustibles, as to their knowledge of the provisions of these regulations and especially of the particular part or parts of the same relating to the articles under which the permit is applied for.

III.—Applicants must also show that they are fully informed as to the properties of the explosives proposed to be transported, kept, sold or used.

## ARTICLE THIRD.

#### MANUFACTURE.

(Chapter 410, Laws of 1882.)

"\sqrt{435.} \* \* \* No nitro-glycerine, dualin or gunpowder, shall be manufactured in said city."

I.—The manufacture of explosives, or any process of such manufacture, is prohibited.

#### ARTICLE FOURTH.

#### PACKING FOR TRANSPORTATION.

(Chapter 410, Laws of 1882.)

"§ 455. \* \* \* And every barrel, cask, canister, bottle, can, vessel, box or parcel, in which the same is sold, or into which the same is delivered on being sold, shall be distinctly labeled with a printed sign or label, printed upon or firmly affixed thereto, describing the article contained therein, with the word "danger" distinctly painted below the same.

I.—Not more than five (5) pounds of explosives shall be put up in any single package, and the same must be a substantial case, bag, canister, or other receptacle, tightly closed to prevent the escape of any of its contents.

II.—Larger quantities shall be packed in double packages, in the following manner: The inner package shall be a substantial case, bag or covering, in the construction of which no metal is used, made to close tightly to prevent the escape of any of the contents, and shall not contain more than ten (10) pounds. Such inner packages shall be packed in an outer water-proof box, barrel or case, made of wood, or other suitable

material other than metal, of such strength and construction that it cannot easily be broken or opened, or otherwise become defective or insecure, or allow the contents to escape while being transported. But not more than fifty (50) pounds in the whole, contained in such inner packages, shall be packed in any one such outer box, barrel or case, unless with the special consent and approval of the Inspector of Combustibles, under such additional special regulations as he may prescribe.

# III.—The following directions apply to all packages:

- I. The interior of every package shall be kept free from grit and otherwise clean. Any package which has been used for any one of the high explosives shall not be used thereafter for any other one of such compounds, or for any other purpose.
- 2. The layers of cartridges containing high explosives should be separated by sawdust or other suitable inexplosive absorbent.
- 3. There shall be no iron or steel used in the construction of any package, unless such iron or steel is effectually covered with zinc, tin or other material. On the outer package there shall be affixed in large and conspicuous characters, by means of a brand or stencil, or a label securely attached, the words "Explosives—Dangerous," followed by the specific name of the explosive and of its manufacturer, and the statement "contains nitro-glycerine per cent. by weight, explosive absorbent per cent. by weight," and also the date of its manufacture.

#### ARTICLE FIFTH.

## TRANSPORTATION.

(Chapter 410, Laws of 1882.)

"§ 455. \* \* \* \* \* and no quantities of nitroglycerine, dualin or gunpowder greater than above provided, shall be kept, carried or conveyed within said city; except that for the purposes of distribution to or delivery from stores and

buildings in said city, a quantity not more than five quartercasks may be carried at any one time, during the day time, for the purpose of transportation from any vessel, or sending the same to said stores or buildings, or any vessel or place without said city, provided that in the carrying or conveying the same it shall be protected by being completely and securely covered with a feather or canvas cover or case, and marked 'gunpowder.' \* \* \* \* \* \* \* \*

I.—No explosives shall be transported, carried or conveyed in any vessel, vehicle or other conveyance used or intended to be used in whole or in part for carrying passengers, unless the same are in the most perfect condition in all respects, and do not exceed in the whole, of any or all kinds, five (5) pounds; and there shall not be transported, carried or conveyed therewith, any caps or detonators, or in proximity to such explosives, any iron or steel tools; and all due precautions shall be taken to guard against fire or explosion.

II.—For the purpose of distribution or delivery of explosives, a quantity not exceeding one hundred and forty (140) pounds may be carried on any vessel, vehicle or conveyance which is not used, or intended to be used in whole or in part for carrying passengers, subject to the following restrictions:

- 1. They must be packed in the manner prescribed in Article Fourth of these regulations.
- 2. High explosives must be in a perfect condition in all respects, and not older than one year.
- 3. They shall not be transported, carried or conveyed in the streets, avenues, roads or highways between sunset and sunrise.
- 4. If transported in the hold of a vessel, the deck must be kept securely closed.
- 5. If on the deck of a vessel, they must be completely and securely covered with a tarpaulin, painted cloth or other suit-

able covering of leather, canvas or rubber, which covering shall be marked with the word "gunpowder" in large and conspicuous characters.

- 6. If in a vehicle they shall be completely and securely inclosed on all sides, top and bottom; or if upon any open vehicle, they shall be covered as above prescribed for transportation upon the deck of a vessel.
- 7. There shall not be any iron or steel in the interior of such vessel or vehicle near the explosives, unless such iron or steel is carefully covered with leather, wood or textile fabric, or other suitable soft or yielding material.
- 8. No matches shall be carried or used upon such vessel or vehicle, except safety matches, which shall be securely kept in a place entirely separated from the explosive.
- 9. In stowing explosives in any such vessel or vehicle, the utmost care shall be taken by means of separating partitions, to secure the explosives from coming in contact with, or being otherwise endangered by any other article or substance forming a part of the cargo or load of such vessel or vehicle, which may be liable to cause fire or explosion.
  - 10. Smoking upon such vessel or vehicle is forbidden.
- 11. No intoxicated person shall be permitted upon such vessel or vehicle.
- 12. Carelessness or recklessness in conducting or driving, loading or unloading such vessel or vehicle, must not be permitted.
- 13. The presence or interference of unauthorized persons, during the loading or unloading of explosives must not be allowed.
- 14. When the loading or unloading has been begun, it must not unnecessarily be interrupted or delayed.
- 15. The transportation of explosives must not be commenced before all necessary arrangements have been made to insure prompt delivery at their destination.

- 16. In transporting explosives the shortest route between the points of receipt and delivery shall be taken, and in case it becomes necessary to do otherwise, the least populated streets must be used.
- 17. Not more than fifty (50) pounds shall be transported in a vessel or vehicle carrying as merchandise any article liable to cause or communicate fire or explosion, such as charcoal, matches, petroleum and other highly combustible articles or materials.
- 18. A vessel or vehicle carrying more than one hundred (100) pounds, shall not stop before reaching its destination unless it be unavoidable, and, especially, shall not unnecessarily stop or delay at any point where such stopping or delaying might be attended with special danger.
- 19. In a vessel or vehicle carrying more than one hundred (100) pounds, the introduction of fire, matches, or any substance, material or article likely to cause explosion or fire, or of any iron or steel or grit, so as to come in contact with such explosive, is prohibited, and due precautions must also be taken to prevent water coming in contact with any nitro-glycerine mixtures. If necessary, an artificial light safely covered, constructed and placed, and safety matches may be used.
- 20. The owner, master or driver of every such vessel or vehicle shall furnish copies of these rules to his employees engaged in the loading, transportation and unloading of explosives, and shall also post copies of the same, in some conspicuous place, where they can be conveniently read; and such owner, master or driver shall take such other measures to thoroughly acquaint his employees, so engaged, with the provisions of these regulations, as may be deemed necessary or as may be specially directed.
- 21. Each vessel or vehicle transporting explosives shall be under the exclusive charge of and be constantly attended by a competent and reliable person, and such person shall not have charge of more than one such vessel or vehicle.

- 22. Any person having charge of more than one hundred (100) pounds while in transit through or in the city, shall be required to have a permit, issued by the Inspector of Combustibles in the name of the Fire Commissioners, which permit is to be obtained as prescribed in Article Second. This regulation shall not, however, apply to railway cars forming part of a continuous train, if such train be under the charge of and constantly attended by a competent and reliable person.
- 23. These permits shall be issued upon the payment of a fee of one (1) dollar, and shall, unless revoked by the Fire Commissioners, remain in force for one year.
- 24. Such permit shall be valid only for the person or persons to whom it is issued.
- 25. The Fire Commissioners reserve the right, if at any time in their judgment the public safety shall require it, to amend and add to the requirements or restrictions herein prescribed before the expiration of any permit granted hereunder, and to require compliance with such amendment or additions.

#### ARTICLE SIXTH.

#### SALES AND STORAGE FOR SALE.

(Chapter 410, Laws of 1882.)

"§ 455. No person shall manufacture, have, keep, sell or give away any gunpowder, blasting powder, gun-cotton, nitroglycerine, dualin or any explosive oils or compounds within the corporate limits of the city of New York, except in the quantities limited, in the manner and upon the conditions herein provided, and under such regulations as the Board of Fire Commissioners shall prescribe; \* \* \* \*

"The said board may issue licenses to persons desiring to sell gunpowder or any of the articles mentioned under this section at retail, at a particular place in said city to be named in said license (provided that the same shall not be in a building used in any part thereof as a dwelling, unless specially authorized by said license) and persons so licensed may have on their premises, if actually kept for sale, a quantity not exceeding at one time, of nitro-glycerine, five pounds; of gun-cotton, five pounds; of gunpowder, fourteen pounds; blasting-powder, twenty-five pounds; and all of said articles shall be put in tight metallic canisters, containing, or capable of containing, not more than one pound each; and the persons so licensed shall place on some conspicuous part of the front of the stores or buildings in which they may be licensed to sell powder, or any of the articles named under this section, a sign on which shall be distinctly printed, in characters legible to persons passing such stores or buildings, the words "licensed to sell gunpowder," or designating such other of the articles herein named as is there offered for sale; and every barrel, cask, canister, bottle, can, vessel, box or parcel, in which the same is sold, or into which the same is delivered on being sold, shall be distinctly labeled with a printed sign or label printed upon or firmly affixed thereto, describing the articles contained therein, with the word "danger" distinctly painted below the same. \* \* \*"

"§464. All persons or corporations who shall be required to have and obtain permits shall furnish such information as may be required, touching the condition of any building and the business therein proposed to be conducted, preliminary to obtaining such permits."

"§459. In case any person is burned by the explosion of any compound, the sale of which is prohibited by any section of this title, or has not been subjected to sanitary survey, or licensed as therein provided, and death ensues therefrom, the person found guilty of selling the same shall be deemed guilty of a felony, and, upon conviction, shall be punished by a fine of not less than one thousand dollars, nor more than five thousand dollars, or by imprisonment in the State prison for a term not less than one year, nor more than five years; and in case of a

- I.—Permits for the sale of explosives will be issued under the following rules:
- I. Application for such permits must be made in writing to the Inspector of Combustibles, stating for whom the permit is desired, the location of the premises at which the explosives are to be kept and sold, the nature of the business in which the applicant is engaged at such premises, and the quantity and description of the explosives intended to be kept on hand for sale.
- 2. No permit will be issued for such sales to be made at any building or premises where either of the following kinds of business is conducted or carried on: Where cigars or tobacco are kept for sale, where paints, oils or varnish are manufactured or kept, either for use or for sale; where dry goods of any kind, toys or other light material of a combustible nature are kept for sale; any carpenter shop, any drug store, any building a license for the sale at which of kerosene or other product of petroleum has been issued, or any building in which fireworks of any kind, petroleum or any of its products, coal oil, camphene, burning fluid or other products or compounds containing any of said substances, matches or cartridges (unless such cartridges are kept in a fire-proof safe or vault); tar, pitch, rosin or turpentine, hay, cotton or hemp are manufactured, stored or kept on sale.
- 3. No permit will be issued for such sales in any frame or wooden building.
- 4. No such permit will be issued for any building in which any person other than the applicant or his family resides.
- 5. No permit will be issued for such sales to be made within that portion of the city bounded as follows, viz.: By Chambers street to West Broadway, by West Broadway, South

Fifth avenue and Fifth avenue to Fourteenth street, by Fourteenth street to Sixth avenue, by Sixth avenue to Twenty-third street, by Twenty-third street to Fourth avenue, by Fourth avenue, Astor place and Lafayette place to Great Jones street; thence by a line running through the block to the corner of Bleecker and Crosby streets; thence by Crosby street to Howard street, by Howard street to Elm street, by Elm street to Reade street, by Reade street to Centre street and thence to Chambers street.

- 6. Not more than one permit will be granted for such sales to be made at premises located on any one square block. Where two or more applications are presented for one block, preference will be given to the one which, in the opinion of the Inspector of Combustibles, is least objectionable.
- 7. All premises for which such permits are issued must be lighted with gas or by electricity, and all lights must be protected with glass or wire coverings.
- 8. The person or persons to whom such permit is issued must sign an agreement not to permit smoking, nor the making or keeping of any fire, nor the use of any substance for illuminating purposes except gas and electricity, upon or about the premises where such sales are licensed, nor to expose any of the said explosives for sale outside the walls of said building, nor in any door or window, and that any violation of such agreement shall operate as a forfeiture of said license.

II.—No person shall sell or give away, or keep for sale or to give away, any explosives unless previously licensed by the Fire Commissioners; and such permit shall specify the kind and quantity of each explosive which may be sold and kept on the premises designated in the permit; the quantity allowed to be so kept on hand for sale in no case to exceed that specified in the provision of law above quoted in this article, to wit: nitro-glycerine, five (5) pounds; gun-cotton, five (5) pounds; gunpowder, fourteen (14) pounds; and blasting powder,

twenty-five (25) pounds. And any other explosive not specifically named in the provision of law last referred to, shall be limited in quantity to five (5) pounds.

III.—No explosives shall be sold or exposed for sale unless the packages are marked as provided under Article Fourth.

IV.—No explosives shall be sold or exposed for sale upon any highway, road, street, avenue, public thoroughfare or public place.

V.—No high explosives more than one year old and not in perfect condition, shall be kept or sold.

VI.—No explosives shall be sold or given away to any person who is not permitted by the Fire Commissioners to use such explosives, as provided in Article Seventh.

VII.—An exact record of the date, kind and quantity of all explosives sold or purchased shall be kept by both the seller and the buyer; and such record shall at all reasonable times be open to inspection by any authorized officers of the Fire Department, who shall also be allowed to take copies of, or extracts from such records. And the seller shall also, on the first business day of each week, report all sales and deliveries of high explosives during the last preceding week, to the Inspector of Combustibles.

VIII.—Applicants shall furnish and file with the Inspector of Combustibles a bond in the penal sum of five thousand (5,000) dollars, with two sufficient sureties, conditioned for the payment of any loss, damage or injury resulting to persons or property by reason of the sale or keeping of such explosives.

IX.—Such permits shall be issued by the Inspector of Combustibles in the name of the Fire Commissioners, upon the payment of a fee of twenty-five (25) dollars, and shall, unless revoked by the Fire Commissioners, remain in force for one year.

X.—Such permits shall be valid only for the person or persons to whom and the particular location for which it is issued.

XI.—The Fire Commissioners reserve the right, if at any time in their judgment the public safety shall require it, to amend and add to the requirements or restrictions herein prescribed, before the expiration of any permit granted hereunder, and to require compliance with such amendment or additions.

NOTE.—Subsequently the Board adopted an amendment to the effect that all dealers in powder for sporting purposes, who have no other explosive materials in stock, and without reference to location, shall be exempted from giving bonds, and that the fee for permits for the sale of gunpowder for sporting purposes only, be fixed at five dollars.

#### ARTICLE SEVENTH.

THE KEEPING, CARE, AND USE OF EXPLOSIVES IN BLASTING OPERATIONS.

(Chapter 410, Laws of 1882.)

"\sqrt{455}. No person shall manufacture, have, keep, sell or give away any gunpowder, blasting-powder, gun-cotton, nitroglycerine, dualin or any explosive oils or compounds, within the corporate limits of the city of New York, except in the quantities limited, in the manner, and upon the conditions herein provided, and under such regulations as the Board of Fire Commissioners shall prescribe. \* \* \* \* "

#### Permits.

I.—All contractors and others now engaged in or proposing hereafter to engage in any blasting operations, shall make application for a permit to keep and use explosives, to the Inspector of Combustibles in writing, giving name, location of office or place of business, occupation, the proposed location of the magazine or hand magazine, a plan or drawing and description of the construction of such magazines, and the quantity and kind of explosives proposed to be kept therein.

II.—Upon compliance by the applicant with all the provisions of the law and of these regulations, the Inspector of Combustibles shall, upon the payment of a fee of twenty-five (25) dollars for each main magazine, and of ten (10) dollars for each hand magazine, issue a permit to such applicant, in the name of the Fire Commissioners, which permit shall remain in force, unless revoked as hereinafter provided, for one year, and may be renewed for a like period upon application, as provided in the last preceding paragraph.

III.—But no such permit shall be issued until the applicant has furnished and filed with the Inspector of Combustibles a bond in the penal sum of five thousand (5,000) dollars, with two sufficient securities, conditioned for the payment of any loss, damage or injury resulting to persons or property by reason of the keeping or use of such explosives.

IV.—Such permit shall be valid only for the person or persons to whom it is issued, and for such locations as may be approved and indorsed upon the permit by the Inspector of Combustibles, who must be promptly notified of any intended change of location.

V.—The permits shall specify all the particulars stated in the application made therefor, with such amendments as may have been made thereto.

VI.—The Fire Commissioners reserve the right, if at any time in their judgment the public safety shall require it, to amend or add to the requirements or restrictions herein prescribed, before the expiration of any permit granted hereunder, and to require compliance with such amendment or additions.

# Main Magazines.

VII.—These magazines shall be well and substantially built of brick, stone or concrete, or they shall be excavated in solid rock, earth, or mine refuse not liable to take fire; and all shall

be so constructed and inclosed as to prevent access thereto by unauthorized persons, and to secure them against danger from without. And each magazine shall have a registered number.

VIII.—They shall be entirely separated from all buildings, structures or works herein designated as "protected structures, etc.," which are of two classes, as follows:

- I. Protected structures, etc., of the first-class comprise all buildings used for dwelling or manufacturing purposes, workshops, furnaces or fire-places for boilers, engines or other machinery, provided the same are occupied by the licensee, or that the persons occupying them consent, in writing, to the proposed location of the magazine, which consent shall be filed with the application for the permit. All highways, roads, streets or avenues, open places of public resort, canals and other navigable waters, docks, piers, sea-walls or reservoirs, are also comprised in this class.
- 2. Protected structures, etc., of the second-class, comprise all structures, etc., not in the first class, and also all buildings used for religious, educational, charitable or public purposes, or for purposes of amusement or instruction.
- IX.—These magazines shall not be used for keeping explosives except under the following restrictions as to their distance from any protected structure, etc., of either class, and as to the maximum quantity of explosives which may be kept therein:
- I. If the magazine is not less than fifty (50) yards from the nearest protected structure, etc., of the first class, and one hundred (100) yards from the nearest protected structure, etc., of the second class, the quantity of blasting-powder which may be kept therein shall not exceed five hundred (500) pounds, or in lieu of each pound of blasting-powder less than this maximum quantity, one-half  $\binom{1}{2}$  pound of any high explosive may be kept therein.

2. If the magazine is not less than seventy-five (75) yards from the nearest protected structure, etc., of the first class, and one hundred and fifty (150) yards from the nearest protected structure, etc., of the second class, the quantity of blasting-powder which may be kept therein shall not exceed one thousand one hundred and twenty (1,120) pounds, or in lieu of each pound of blasting powder less than this maximum quantity, one-half  $(\frac{1}{2})$  pound of any high explosive may be kept therein.

X.—Should the conditions as to the distance of a magazine from protected structures, etc., of either class, as herein above prescribed, at any time during the continuance of the permit, so change as to make it necessary to lessen the quantity of explosives to be kept in such magazine in order to conform to the provisions of the last preceding paragraph, immediate report of such change of conditions shall be made by the licensee to the Inspector of Combustibles; and any failure to comply with this requirement shall involve the forfeiture of the permit, and subject the person or persons guilty of such violation to the penalty provided by law for keeping such explosives without a permit.

XI.—No detonators shall be kept in a magazine licensed for keeping high explosives.

XII.—The magazine shall be used only for the keeping of the explosives specified in the permit.

XIII.—The interior of the magazine and the necessary shelves and fixtures therein shall be so constructed, or so lined or covered, as to prevent the exposure of any iron or steel, or the detaching of any grit, iron or steel, or similar substance, in such a manner as to allow such substances to come in contact with the explosive, and such interior shelves and fittings shall be kept clean and free from grit.

XIV.—Unless the magazine is in an excavation, or is licensed for keeping not more than five hundred (500) pounds of blasting-powder, etc., it shall be protected by a sufficient lightning conductor.

XV.—Before any repairs or alterations are made to any magazine, or to any part thereof, all explosives shall be carefully removed therefrom, and it shall be thoroughly washed out, and all tools or implements used in making such repairs and alterations shall be of wood, copper or brass, or other soft metal or material, or the same shall be covered with some safe and suitable material.

XVI.—No fire, matches, or any substance or article liable to cause explosion or fire, or any iron, steel or grit, shall be permitted in any such magazine.

XVII.—No person shall be allowed to enter any such magazine wearing ordinary boots or shoes, unless the same are protected with rubber boots or overshoes.

XVIII. — As nitro-glycerine mixtures are dangerously affected by water, all magazines in which such explosives are kept must be thoroughly protected against moisture.

XIX.—Smoking must not be permitted in such magazines.

XX.—No person under the age of twenty-one (21) years must be permitted to enter such magazine, except in the presence and under the direction of an adult authorized to enter the same.

XXI.—A copy of these rules, as furnished, and the permit must be kept conspicuously posted up in such magazine in such a manner that they can be conveniently read.

XXII.—Upon the outside of, or near to such magazine, there shall be placed a painted sign with the words "Danger—Magazine for explosives" in black letters not less than one (1)

foot high on a white ground; and in addition thereto there shall be displayed upon, or near the magazine, a red flag not less than one (I) yard square during daylight, and in lieu thereof at night a red lantern properly lighted.

XXIII.—Only such cartridges as are in perfect condition and which are not more than eighteen (18) months old, shall be kept in such magazine.

# Hand Magazines.

XXIV.—The hand magazines, in which high explosives are kept, shall be so constructed as to protect the cartridges from being frozen or getting moist, and shall be closed to secure them against danger from without, and to prevent access to them by unauthorized persons. And each magazine shall have a registered number.

XXV.—Caps, detonators or exploders shall be kept at least fifteen (15) feet distant from the hand magazine.

XXVI.—Only such cartridges as are in perfect condition and which are not more than eighteen (18) months old, shall be kept in such magazines.

XXVII.—The cartridges shall be furnished to the men only in such small quantities as the necessities of the moment require.

XXVIII.—The hand magazines shall be entirely separated from all buildings and structures designated as "protected structures, etc.," in Paragraph VIII. of this article, as follows:

1. If the magazine is not less than eighteen (18) yards from the nearest other hand magazine and from the nearest protected structure, etc., of the first class, and thirty-six (36) yards from the nearest protected structure, etc., of the second class, the quantity of blasting-powder which may be kept therein shall not exceed sixty (60) pounds, or in lieu of each pound of

blasting-powder less than this maximum quantity, one-half  $(\frac{1}{2})$  pound of any high explosive.

2. If the magazine is not less than twenty-five (25) yards from the nearest protected structure, etc., of the first class, and fifty (50) yards from the nearest protected structure, etc., of the second class, the quantity of blasting-powder which may be kept therein shall not exceed one hundred and twenty-five (125) pounds, or in lieu of each pound of blasting-powder less than this maximum quantity, one-half (½) pound of any high explosive.

XXIX.—No tools or implements of any kind shall be kept in a hand magazine.

XXX.—On other than working days, and from the time when work is suspended until it is resumed, all hand magazines shall be guarded by sober and reliable watchmen.

XXXI.—No person under the age of twenty-one (21) years must be permitted to enter or open a hand magazine, except in the presence and under the direction of an adult authorized to enter and open the same.

XXXII.—To prevent the freezing of nitro-glycerine mixtures during cold weather (when the temperature is below 54 degrees Fahrenheit), the magazine shall be surrounded with fresh horse manure.

Directions for the Use of Explosives in Blasting Operations.

XXXIII.—The cartridges delivered to the men shall be protected by them against frost, moisture, fire and contact with iron, steel or grit.

XXXIV.—It is forbidden to use cartridges, frozen or only partly thawed out.

XXXV.—It is forbidden to warm frozen cartridges by direct exposure to fire, by keeping them before fire-places, by putting them on stoves or in ovens, or by laying them on hot ashes.

- I. It is required that frozen cartridges shall be returned to the foreman in charge and shall not be reissued for use until they are thoroughly thawed out.
- 2. It is required, in thawing out frozen high explosives, that one of the two following methods shall be observed, the first being the safest and most practicable for large quantities and therefore preferable:

Put the boxes containing the explosives in fresh horse manure, or entirely surround the magazine therewith.

Put the cartridges in a double vessel, consisting of two water-tight tin kettles or pots, so made that one shall fit inside of the other and leave a space for water (which must be lukewarm), between the bottoms and sides.

XXXVI.—It is forbidden to attempt to break or cut cartridges entirely or partly frozen.

XXXVII.—It is forbidden to prime more cartridges with fuses and detonators than are actually needed at the moment, or to keep on hand such primed cartridges.

XXXVIII.—It is forbidden to use metallic rammers in tamping drill-hole charges.

XXXIX.—It is forbidden to "bring home" the tamping by powerful strokes.

XL.—It is forbidden to introduce into a drill-hole more than one primer, or to roughly handle the primer, especially while placing it on top of the charge, or while tamping it.

XLI.—It is forbidden to approach a drill-hole charge which failed to explode without waiting at least ten minutes, counted from the time of setting fire to its fuse.

XLII.—It is forbidden to remove the tamping of a charged drill-hole.

XLIII.—It is required, in case an attempt to fire a "missed blast" by means of exploding a strong primer on top of it is unsuccessful, that a new hole be drilled not nearer than twelve (12) inches from the first one, and a fresh charge put in (that being the safest method), the explosion of which will probably be communicated to the first charge, or if it is not, will at least dislodge it. But the distance between these holes must be increased if there is any reason to believe that the nitro-glycerine mixture of the first charge has spread laterally.

XLIV.—It is forbidden, in case the explosion of a charge does not carry away the whole drill-hole, leaving the lower part intact, to use the remaining part of the old drill-hole as a starting point for a new drill-hole; because portions of the former charge may remain and explode when exposed to the blows of percussion drills.

XLV.—It is forbidden to allow boys under twenty-one (21) years of age, or men who cannot read English, or are uninstructed in the care of high explosives, to be in the vicinity of hand magazines or to handle such explosives.

XLVI.—It is required that, to insure the safety of surrounding property and of persons in the vicinity, no larger charge shall ever be used than is necessary to properly start the rock.

XLVII.—It is required that rock excavations contiguous to any structure, shall be so carried on as not to cause any damage to such structures. To secure this, weak walls, etc., of such structures must be shored up; and all rotten or decomposed rock must be removed by the use of gads, picks and crow-bars only. When blasting next to such structures is unavoidable, light face blasts only, with short lines of resistance and small charges shall be used.

XLVIII.—It is required that only careful, reliable and thoroughly experienced foremen shall be employed in blasting operations.

XLIX.—It is required that in the neighborhood of roads, houses and objects which may be damaged by blasts, the shots shall be carefully covered (preferably with brush mattresses, fascines and the like), and the charges shall be so reduced in size that no flying about of debris shall be possible. Red flags shall be placed at reasonable distances from the blast on all sides; a whistle shall also be blown, or a bell rung, five minutes before the explosion takes place, to give all persons proper warning. Men shall also be stationed at the doors of houses in the immediate vicinity and on the different highways and sidewalks to caution all persons against approaching the blast.

## ARTICLE EIGHTH.

## INSPECTION AND SEIZURE.

(Chapter 410, Laws of 1882.)

"\ 463. The commissioners and their officers or agents, under the direction of said commissioners, or either of them. are hereby empowered at any and all times to enter into and examine all buildings, dwelling-houses, livery and other stables, hay-boats, or vessels and places where any merchandise, gunpowder, hemp, flax, tow, hav, rushes, firewood, boards, shingles, shavings or other combustible materials may be lodged, for the purpose of ascertaining all violations of any of the provisions of this title, and also the places where ashes may be deposited, and upon finding that any of them are defective or dangerous, or that a violation of this title exists therein, may deliver a written or printed notice, containing an extract from this title, of the provisions in reference thereto, and notice of any violation thereof, and notice to remove, amend or secure the same within a period to be fixed therein. And in case of neglect or refusal on the part of such occupant or of the possessor of such combustible materials, or any of them, so to remove, amend or secure the same within the time and in the manner directed by the said commissioners in such notice, the

party offending shall forfeit and pay, in addition to any penalty otherwise imposed, the sum of twenty-five dollars, and the further sum of five dollars for every day's neglect to remove, amend or secure the same after being so notified. All the expenses of any removal, alteration or amendment as aforesaid, shall be paid in the first instance by the occupant, but shall be chargeable against the owner of such dwelling-house or other building, and shall be deducted from the rent of the same, unless such expense be rendered necessary by the act or default of such occupant, or unless there be a special agreement to the contrary between the parties."

"§ 455. \* \* \* \* All gunpowder, gun-cotton, blasting-powder, dualin, nitro-glycerine, or other explosive compound found in violation of this section, shall be forthwith seized and safely stored, and be sold, upon three days' notice to the owner or claimant, and the proceeds of such sale, after deducting all expenses, shall be forfeited and paid over to and for the use and benefit of the relief fund of the Fire Department of the City of New York. \* \* \* "

I.—Any inspecting officer of the Fire Department discovering any violation of any provision of law quoted or referred to in these regulations, or any violation of any provision of these regulations, shall, at the time of making such discovery, serve upon the owner or possessor of the explosives so found to be packed, transported, offered for sale, stored or used, in contravention of the law or of these regulations, or in the absence of such owner or occupant, upon the person found in charge of such explosives for the time being, a notice, issued in the name of the Fire Commissioners, specifying the nature of the violation found, and requiring the violation to be removed, with due regard to the public safety, within a reasonable time, to be definitely stated in the notice by such Inspector, which notice shall be made out upon a form to be provided for that purpose.

II.—The Inspectors shall make daily reports in writing to the Inspector of Combustibles, of the buildings, premises, etc., visited, and their actions and operations during the preceding day, and they shall make a special report of every violation found, and of their action and recommendations in such cases.

III.—If, in the judgment of an Inspector, there is at any time urgent need of immediate action by, or of instructions from the Inspector of Combustibles, with reference to any violation found by them, they shall at once report the same to him by the nearest department or other telephone station, or by messenger or in person.

IV.—In case it becomes necessary, under the provisions of law quoted at the beginning of this article, to seize explosives for violation of the law or of these regulations, such seizure must be made promptly and reported at once.

## ARTICLE NINTH.

PENALTIES FOR VIOLATION OF THE LAWS OR REGULATIONS.

(Chapter 410, Laws of 1882.)

Enforcement of this Act—Suits or Actions, how Brought— Duties of Attorney to the Department—Settlement of Suits or Judgments.

"§ 431. The Board of Fire Commissioners is hereby authorized, empowered, and especially charged with the duties of enforcing the several provisions of this chapter, and may, subject to the other provisions of this act, incur any expense necessary and proper therefor, and said Board is hereby authorized and empowered to receive and collect all license fees mentioned in this chapter, and to sue for, and shall have the exclusive right of recovery of, any and all penalties imposed under this chapter, and may sue for and recover and collect the same, with costs, in the manner provided for in actions under the Code of Civil Procedure, and shall apply the same to the

uses and purposes of the relief fund of the Fire Department in the city of New York, and the said Board may bring any suit or action for the enforcement of its rights and contracts, and for the protection, possession, and maintenance of the property under the control of said department; and any action to recover any fee, fine or penalty under this chapter may be brought in any of the district courts in said city, and the attorney to the Fire Department shall, under the direction of said Board, take charge of the prosecution of all suits or proceedings instituted for the recovery and collection of penalties, and the enforcement of the several provisions of this chapter; collect and receive all moneys upon judgments, suits, or proceedings so instituted; pay all costs and disbursements, and discontinue suits and proceedings, and execute satisfaction of judgments upon payment of penalties, or costs, and in compliance with orders made in such suits and proceedings; shall keep a correct and accurate register of all suits and proceedings, and account for all moneys received and paid out thereon; and shall pay over to the treasurer of the relief fund the amount of all license fees, penalties and moneys received and collected by him; and the said Board is authorized to settle or compromise any such suit or judgment for less than the amount of the same, in case, in their judgment, they are satisfied that payment of the full amount cannot be collected."

# Liability in Action for Damages.

"§ 459. In case any person is burned by the explosion of any compound, the sale of which is prohibited by any section of this title, or has not been subjected to sanitary survey, or licensed as therein provided, and death ensues therefrom, the person found guilty of selling the same shall be deemed guilty of a felony, and, upon conviction, shall be punished by a fine of not less than one thousand dollars, nor more than five thousand dollars, or by imprisonment in the State prison for a term not less than one year nor more than five years; and in

case of a bodily injury the party injured may maintain an action for damages against the party violating the provisions of this title. \* \* \* \* "

Right to Enter Stables, Vessels, etc.—Notice to Remove or Secure Combustible Material—Collection of Expense of Removal.

"\$ 463. The commissioners and their officers or agents, under the direction of said commissioners or either of them, are hereby empowered at any and all times to enter into and examine all buildings, dwelling-houses, livery and other stables, hav boats or vessels, and places where any merchandise, gunpowder, hemp, flax, tow, hav, rushes, firewood, boards, shingles, shavings or other combustible materials may be lodged, for the purpose of ascertaining all violations of any of the provisions of this title, and also the places where ashes may be deposited. and upon finding that any of them are defective or dangerous, or that a violation of this title exists therein, may deliver a written or printed notice, containing an extract from this title. of the provisions in reference thereto, and notice of any violation thereof, and notice to remove, amend or secure the same within a period to be fixed therein. And in case of neglect or refusal on the part of such occupant or of the possessor of such combustible materials, or any of them, so to remove, amend or secure the same within the time and in the manner directed by the said commissioners in such notice, the party offending shall forfeit and pay, in addition to any penalty otherwise imposed, the sum of twenty-five dollars, and the further sum of five dollars for every day's neglect to remove, amend or secure the same after being so notified. All the expenses of any removal, alteration or amendment as aforesaid, shall be paid in the first instance by the occupant, but shall be chargeable against the owner of such dwelling-house or other building, and shall be deducted from the rent of the same unless such expense be rendered necessary by the act or default of such occupant, or unless there be a special agreement to the contrary between the parties."

Non-enumerated Fines and Penalties—Part may be Paid to Informer.

"§ 465. Any person, persons or corporation, for the violation of, or non-compliance with, any of the several provisions of the several sections of this title, when the penalty is not therein specially provided, shall severally forfeit and pay a fine or penalty in the sum of fifty dollars for each and every offense, or shall forfeit and pay the penalties respectively imposed under any of said sections, and shall also be severally liable for the removal, amendment or abatement of any violation of, or noncompliance with, any requirement under said sections, and shall also be severally liable for the payment of the further penalty of the sum of fifty dollars for any violation of, or non-compliance with, any regulation, order or special direction issued by said commissioners, as authorized under this chapter. Said commissioners may, in their discretion, pay a portion of a fine or penalty, when collected, not to exceed one-half thereof, to an informer."

I.—Violations of any of the provisions of law quoted in these regulations, or any of the provisions of these regulations, shall, at the option of the Fire Commissioners, be punishable, in addition to the penalties prescribed by law, by a revocation of any permit granted thereunder.

#### ARTICLE TENTH.

NOTES ON THE PROPERTIES OF CERTAIN HIGH EXPLOSIVES.

I.—Pure nitro-glycerine, at 60 degrees Fahrenheit, has a specific gravity of 1.6. It is odorless, nearly colorless, and has a sweetish, burning taste. It is poisonous. Handling it is apt to cause headache. It is slightly soluble in water. It will explode when heated to a temperature of about 356 degrees Fahrenheit.

II.—These properties undergo no change when nitroglycerine is absorbed by other substances, in forming nitroglycerine mixtures or dynamites such as those enumerated in the paragraph defining the term "high explosives."

III.—The temperature at which nitro-glycerine mixtures freeze varies from 39 degrees to 53 degrees Fahrenheit, according to the difference in the methods of manufacture and the quality of the nitro-glycerine used. The use of such substances as silicous marl ("Kieselguhr") as an absorbent in the manufacture of Dynamite or Giant Powder No. 1, undoubtedly hastens their freezing.

IV.—Reliable experiments made in Austria show that frozen nitro-glycerine mixtures are less liable to explode from mechanical shocks than when they are not frozen.

V.—When, however, the nitro-glycerine mixture is in a partly frozen condition, or when it is either in process of freezing or of thawing, its sensitiveness to explosion is greater than when in its normal condition; and it is then especially liable to be exploded by repeated light shocks, such as are produced in the operation of packing, transportation, etc. The experience both of the laboratory and of the factory confirms these views.

VI.—As before stated, nitro-glycerine mixtures explode at a temperature of about 356 degrees Fahrenheit. They also explode by percussion, concussion, friction, pressure, etc., viz.: by any act converting mechanical energy into heat.

VII.—By the use of fulminate of mercury caps as an initiatory explosive the entire mass of a nitro-glycerine mixture is converted into gas with such suddenness that it may practically be considered instantaneous; this sudden effect is termed "detonation."

VIII.—In dynamites containing a large percentage of nitroglycerine, the latter is liable to exude or ooze out. This is especially so in warm weather, or in thawing out at high temperatures. IX.—Exposure to water is injurious to dynamites. In the high grades the water, by its greater affinity for the inexplosive absorbent (Kieselguhr), drives out the nitro-glycerine; in the lower grades it is apt to dissolve the salts (nitrates of potash or soda, etc.) contained in the explosive absorbent, thus setting free the nitro-glycerine.

X.—Nitro-glycerine mixtures are usually put up and sold in cylindrical paper shells or cases, in "cartridge" form. These cartridges are furnished to order of any required diameter and length, and are packed in boxes containing each twenty-five (25) or fifty (50) pounds.

These regulations shall go into effect on July 1, 1889, and all permits issued prior to that date shall thereby be revoked.

#### BUREAU OF INSPECTION OF BUILDINGS.

Plans and Specifications for Alterations to Buildings Filed and Acted Upon.

CLASSIFICATION.	Pending last Report.	Received since.	Total.	Approved.	Amended and Approved.	Disapproved.	Now pending.	Total.	ESTIMATED COST.
Dwelling-houses	2	629	631	343	245	40	3	631	\$1,470,391 00
Flats	1	100	101	<b>4</b> 6	34	21		101	564,245 00
Tenement-houses	3	477	480	288	157	30	5	480	544,238 00
Hotels and boarding-houses	2	52	54	20	25	9		54	247,070 00
Stores		253	253	127	86	34	6	253	649,276 00
Office buildings		73	73	29	37	6	I	73	729,803 00
Manufactories and workshops.	3	278	291	129	110	39	3	281	857,341 00
School-houses		11	11	10			1	11	22,340 00
Churches		22	22	10	10	2		22	156,910 00
Public buildings		106	106	57	42	7		106	660,110 co
Stables		51	51	18	26	6	I	51	186,046 00
Frame buildings		463	463	287	114	60	2	463	320,174 00
Totals	11	2,515	2,526	1,364	886	254	22	2,526	\$6,407,944 CO

Plans and Specifications for New Buildings Filed and Acted Upon.

Classification.	Pending last Report.	Received since.	Total.	Approved.	Amended and Approved.	Disapproved.	Now pending.	Fotal.	ESTIMATED COST.
Dwelling-houses—Estimated }		4	4		2	2		4	\$485,000 00
Dwelling-houses—Estimated cost between \$20,000 and \$50,000		238	238	36	185	17		238	6,161,300 ∞
Dwelling-houses—Estimated   cost less than \$20,000	1	524	525	177	304	44		525	5,927,050 00
Flats and tenements—Esti- mated cost over \$15,000	4	1,351	1,355	352	925	74	4	1,355	32,073,500 00
Tenement-houses—Estimated cost less than \$15,000	2	192	194	71	114	9		194	2,299,900 00
Hotels and boarding-houses		16	16	3	7	6		16	2,193,000 00
Stores—Estimated cost over		52	52	11	33	8		52	4,669.000 00
Stores—Estimated cost be-		45	45	7	35	3		45	953,700 00
Stores—Estimated cost less than \$15,000		53	53	17	30	6		53	236,070 00
Office buildings	1	21	22	9	9	4	3	22	2,913,750 00
Manufactories and workshops.		151	151	39	91	21		151	2,797,400 00
School-houses	r	10	11	3	5	3		11	768,000 00
Churches		25	25	2	20	3		25	1,409,800 00
Public buildings-Municipal		5	5	3	1	1		5	139,435 00
Public buildings—Places of amusement, etc	1	31	32	10	14	8		32	3,698,227 00
Stables	1	84	85	32	46	7		85	976,275 00
Frame dwellings	·	501	501	265	198	31	7	501	1,420,925 00
Other frame structures		904	904	732	96	76		904	382,540 00
Totals	11	4,207	4,218	1 769	2,115	323	11	4,218	\$59,504,872 00

Number of applications for permits for new buildings and alterations, 4,871, which includes 589 special permits for street stands erected for the Centennial Parades.

#### Complaints Received and Investigated.

					8				
Nature.	Pending last Report.	Received since.	Total.	Unfounded.	Remedied on Verbal Notice.	Notices to be Issued.	Total.	Now pending.	
Defective flues	2	65	67	44	17	6	67		
Defective construction and materials.	5	41	46	29	r	10	40	6	
Defective leaders	92	632	724	243	67	335	645	79	
Electric current without cut-offs outside of building		5	5	ı	r	2	4	I	
Erecting and altering without permit.	7	93	100	54	4	36	94	6	
Frame structures erected or re- moved without permit	12	154	166-	64	5	92 65	161 72	5	
be opened from the outside)	3	ioi	104	6	-			32	
Hoistway openings not guarded  Insufficient means of escape, fire-)		21	21		1	10	888	4	
escapes out of repair, etc	220	1,015	1,235	283	91	514		347	
No iron shutters	3	13	16	3		l II	14	2	
Stairway openings floored over	2	I	3	••	I	I	2	1	
Steam-pipes too near woodwork	••	5	5	4			4	1	
Unsafe buildings	19	848	867	413	38	384	835	32	
Unsafe freight elevators		8	8	6		2	8		
Totals	365	3,002	3,367	1,156	227	1,468	2,851	516	
Passenger Elevators.  Number inspected									
Disposition of Cases I	Found	d not	in C	ompli	ance	with	i Lar	υ.	
Pending last report									
Complied with law on notice									
Now pending								46	

Forwarded for prosecution.....

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#### Violations of Law and Unsafe Buildings.

Nature.	Pending last Report.	Received since.	Total for Disposition.	Removed before Action by Courts.	Removed on Order of Courts.	Dismissed by Courts.	Discontinued.	Total Final Disposition.	Now pending.	Forwarded for Prosecution.
Defective construction, ma- terials, etc	198	864	1,062	790	••••	2	62	854	208	718
ing without permit, or after disapproval) Insufficient means of escape,	227	766	993	707	4	6	36	753	240	651
fire-escapes, aisles ob-	926	3,068	3,994	2,618	I	7	567	3,193	801	1,752
Unsafe buildings	389	1,162	1,551	1,253	8	••••	59	1,320	231	56
Totals	1,740	5,860	7,600	5,368	13	15	724	6,120	1,480	3,177

#### Notices Issued.

To place fire-escapes on buildings	4,108
To remove violations of law	2,007
To repair passenger elevators	153
To remove unsafe buildings	1,739
Of disapproval of plans	780
Total	8,787

#### Proceedings of Board of Examiners.

Number of meetings held

Number of meetings field	23
Number of cases acted upon	368
Number of applicants for appointment as Inspectors	
examined	30
Found qualified	
Not qualified 17	

#### Petitions for Modification of the Law.

	Approved.	DISAPPROVED.	Total.	
New buildings	182	15	197	
Alterations	124	20	144	
Iron shutters	11	16	27	
Totals	317	51	368	

Location of Buildings Commenced and Completed During the Year.

Location.	COMMENCED.	COMPLETED
South of Chambers street	24	16
Between Chambers and Houston streets	240	189
Between Houston and Twenty-third streets	183	156
Between Twenty-third and Fifty-pinth streets	246	253
Between Fifty-ninth and One Hundred and Tenth streets, east of Fifth avenue	417	428
Between Fifty-ninth and One Hundred and Tenth streets, west of Fifth avenue	736	571
Between One Hundred and Tenth street and Harlem river, east of Eighth avenue	463	482
Between One Hundred and Tenth street and Harlem river, west of Eighth avenue	175	169
North of Harlem river, south of One Hundred and Seventy-seventh	555	581
North of Harlem river, north of One Huudred and Seventy-seventh street	143	276
Total, 1889	3,282	3,121
Total, 1888	2,691	3,245

#### ATTORNEY TO THE DEPARTMENT. Violations of Law Relating to Combustibles, etc.

	For	Dispo	SITION.	DISPOSED OF							
NATURE OF VIOLATIONS.				COMM	FORE ENCE- IT OF ATION.	AFTER COMMENCEMENT OF LITIGATION.					
	Pending last Report,	Received since.	Total,	Recalled-Violations Removed.	Recalled for other Reasons.	Violations Removed before Trial,	Judgment for Depart- ment.	Penalty Paid and Discontinued.	Dismissed.	Total.	Now Pending.
Selling kerosene oil without license		10	10						3	3	7
Hoistways found open after conclusion of business Fireworks, chemicals,	I		ı		••		ı			I	
matches, etc., kept with-	4		4		3	1	••			4	
Failure to provide tele- graphic communication		1	I	••		••					1
Totals	5	11	16		3	1	I	••	3	8	8

#### Violations of Law Relating to Buildings.

	For	DISPO	SITION.	DISPOSED OF.							
NATURE OF VIOLATIONS.				COMM	ORE ENCE- T OF ATION.	AFTER COMMENCEMENT OF LITIGATION.				ENT	
	Pending last Report.	Received since.	Total.	Recalled-Violations Removed.	Recalled for other Reasons.	Violations Removed before Trial.	Violations Removed after Judgment.	Dismissed by Court.	Dismissed for Irregularity or Insufficiency of Papers.	Total,	Now Pending.
Defective construction, ma- terials, etc	193	718	911	543	40	97	12	2	24	718	193
Erecting, altering or removing without permit or after disapproval	175	651	826	438	12	118	36	6	18	628	198
Insufficient means of escape, fire-escapes, aisles obstructed, etc	348	1,752	2,100	948	311	293	70	7	58	1,687	413
Unsafe buildings	28	51	79		••	48	12		8	€8	11
Defective elevators	1	18	19	9				••	1	10	9
Totals	745	3,190	3,935	1,938	363	556	130	15	109	3,111	824

#### Miscellaneous Business.

NATURE.	PENDING LAST REPORT.	RECEIVED.	Total.	DISPOSED OF.	Now Pending.
Opinions required	1	11	12	12	
Hotel cases, rope fire-escapes	84		84	••	84
Totals	85	11	96	12	84

#### Money Received.

Violations of building laws—		
On hand, last report	\$135	00
Received—		
Violation case No. 570 of 1887—Judgment	50	00
Violation case No. 1361 of 1888—Judgment	50	00
Fire-escape case No. 1167 of 1888—Judgment.	50	00
Elevator case No. 4156 of 1888—Judgment	100	00
Fire-escape case No. 927 of 1888—Judgment	50	00
Fire-escape case No. 751 of 1888—Costs	10	00
Violation cases Nos. 327 and 341 of 1888—Costs	10	00
Unsafe case No. 755 of 1886—Survey fee	25	00
Fire-escape case No. 500 of 1887—Costs	10	00
Unsafe case No. 998 of 1886—Survey fee	25	00
Violation case No. 24 of 1889—Judgment	100	00
Fire-escape case No. 327 of 1888—Costs	10	00
Violation case No. 97 of 1883—Costs	3	06
Violation case No. 629 of 1888—Judgment	50	00
Unsafe case No. 948 of 1886—Survey fee	25	00
Violation case No. 16 of 1889—Judgment	100	00
Fire-escape case No. 2871 of 1888—Costs	5	00
Violation case No. 327 of 1889—Judgment	100	00
Violation case No. 1941 of 1884—Costs	10	78
Violation cases Nos. 167 and 244 of 1886—Costs	IO	00
Violation case No. 272 of 1889—Judgment	100	00
Violation case No. 469 of 1888—Judgment	107	80
Unsafe cases Nos. 530 and 532 of 1889—Survey		
fees	75	00
	\$1,211	64
Paid to the Comptroller, as required by law		
Balance on hand	\$75	00

#### Cases Against the Department.

NAME OF PLAINTIFF.	Pending last Report.	Received.	NATURE OF ACTION.	Disposed of.	Now Pending.
The People ex rel. Timothy Sullivan, No. 1	1		Certiorari to review removal		ı
The People ex rel. Timothy Sullivan, No. 3	1		Certiorari to review removal		ı
The People ex rel. Peter H. Short	I		Certiorari to review removal	{Writ dis-}	
The People ex rel. Francis J. Reilly	1		Certiorari to review removal	Discontinued	
The People ex rel. John Davis	I		Certiorari to review removal		I
The People ex rel. William J. O'Connor.	ı		Certiorari to review removal		I
The People ex rel. Jos. Keegan	ı		Certiorari to review removal	••••	I
The People ex rel. John Gillespie		1	Certiorari to review removal		ı
The People ex rel. Patrick H. Breen		1	Certiorari to review removal		1
The People ex rel. Alex. Hicinbothem.		I	Certiorari to review removal		1
The People ex rel. S. W. Ehrich and another		1	Application for mandamus	Granted	
Thomas O'Connor	τ		Damages forpersonal injuries		1
Mary E. Pinckney, administratrix	1		Damages for personal injuries		1
James O'Brien	1		Damages for personal injuries		1
Josephine Donnelly, an infant	1		Damages for personal injuries	Discontinued.	
	ıı	4		4	11

#### FIRE-ALARM TELEGRAPH.

The amount of labor and material expended upon the circuits to maintain the efficiency of the fire-alarm telegraph, was unusually large during the year, in consequence of the constant interferences caused principally by the extensive removal of poles and wires by workmen engaged under the direction of the Board of Electrical Control.

Changes and removal of poles which have been effected in certain localities have made it necessary to re-run many overhead circuits, involving considerable labor and time on the part of the Department's employees.

All of the fire-alarm telegraph poles have been removed from the Broadway and Sixth avenue subway routes from and

including Fifty-eighth street, Fourth street, South Fifth avenue, West Broadway and Church street to Bowling Green, except a few poles on South Fifth avenue which are still required. The removal of many poles and wires from adjacent streets was also made possible by adapting the circuits thereon to the subways.

Old poles on and adjacent to lines of subways cannot always be removed at once, because many of them are upon long routes, and are needed for circuits which cannot be put under ground before a complete subway system has been provided. Some lines of large poles remain, from which most of the wires have been removed, now carrying but a few, and in many cases but a single wire. These cannot be disturbed before further provision for subway work is made; and unless a liberal appropriation is made for such work in the immediate future, a considerable expenditure will be necessitated for reconstruction of portions of the overhead system. The authority granted to telegraph companies to put their wires upon the elevated railroad structure has enabled them to abandon several lines of poles, among which are some that were constructed by them for this Department and occupied by its wires; no subways having been provided upon such routes, and permission to attach the wires of the fire-alarm system to the elevated railroad structure having been denied, it is at present impracticable to remove such lines of poles.

The transferring of the circuits to the subways, which was begun during the year 1888, has been continued as extensively as the amount appropriated would permit and as expeditiously as practicable, but the work is prosecuted under many disadvantages. The splicing of cables with many conductors must be made by expert workmen, with great care, and cannot be done in wet weather. The work is also delayed by the impossibility of gaining access to the subway manholes, for entire days at a time, owing to stormy weather, or to their occupancy by men engaged in other subway work.

The plan which has been adopted of extending the cables, where possible, from subway manholes to lamp-post boxes, and providing therewith facilities for making splices, without opening the manholes, will, it is believed, be of great advantage, and its continuance in future work is recommended.

The second contract for subway work will soon be completed. Nearly all of the cable is laid, and the splicing up and connecting of stations is progressing. When this is finished, the number of companies which will have direct subway connection from Headquarters will have been increased from twelve, at last report, to twenty-six, as follows:

Engine Company No. 4, No. 39 Liberty street.

6		6	No.	100	Cedar	street.

55, No. 173 Elm street.

Hook and Ladder Company No. 3, No. 108 East Thirteenth street.

Hook and Ladder Company No. 4, No. 788 Eighth avenue. Hook and Ladder Company No. 8, No. 7 North Moore street.

Hook and Ladder Company No. 9, No. 209 Elizabeth street.

Hook and Ladder Company No. 10, No. 191 Fulton street. Hook and Ladder Company No. 15, Old Slip, between Water and Front streets.

Hook and Ladder Company No. 16, No. 159 East Sixty-seventh street.

Hook and Ladder Company No. 20, No. 157 Mercer street.

Connection has also been made with the Repair Shops, No. 130 West Third street, and Police Headquarters, No. 300 Mulberry street.

Short loops from convenient points (overhead connections) have been made from the underground circuits to the following companies:

Engine Company No. 1, No. 165 West Twenty-ninth street.

- " 2, No. 530 West Forty-third street.
- " 3, No. 417 West Seventeenth street.
- " 19, No. 355 West Twenty-fifth street.
- " 24, No. 78 Morton street.
- " 26, No. 220 West Thirty-seventh street.
- " 34, No. 440 West Thirty-third street.

Engine Company No. 43 (floating engine "William F. Havemeyer"), foot of Clinton street, East river.

Hook and Ladder Company No. 5, No. 96 Charles street.

Hook and Ladder Company No. 12, No. 243 West Twentieth street.

The number of signal-boxes having direct underground connection, when the work now in progress is finished, will be one hundred and forty-five, located upon and contiguous to the subway routes before referred to.

As soon as the necessary information defining the routes of projected subways, to enable the preparation of specifications, can be obtained from the Board of Electrical Control, the work will be continued to the extent of the appropriation made for the purpose.

Eighty-five miles of old wires have been taken down.

Seventy-nine miles of new wires have been strung in repairs and extensions.

Ninety-nine poles have been reset.

One hundred and seventy poles have been set.

Three hundred and ten poles have been taken down and condemned.

Twenty-seven new alarm-boxes have been added to the system.

The aggregate number of signal boxes is as follows:

0	
Street boxes	
In schools	
In other institutions	
	874
Special boxes in theatres, manufactories, etc	236
•	
Aggregate number of signal-boxes in direct com-	
munication with the Department	1,110

Of the street boxes, one hundred and seventy-one are equipped with keyless doors, and one hundred and five are attached to combination lamp and signal posts.

#### Number of alarms and calls:

#### First alarms from-

Street boxes	1,603	
Combination circuits	I	
Special building boxes	15	
Police Headquarters	3	
Metropolitan Telephone	I	
Automatic Signal Telegraph Company	22	
American District Telegraph Company	8	
		1,653
Second alarms		94
Third alarms		36

#### Special calls for— Companies ..... 170 Officers I Increased water pressure..... 70 Insurance Patrol..... 91 Ambulances ..... 298 Charities and Correction's steamboat..... 1 Police steamboat.... Total alarms and calls ..... Messages transmitted..... 9,774 Messages received..... 9,926 Total messages..... Notice of companies leaving quarters on verbal alarms. I,07I Number of Fire Alarm Keys in Use. By the Uniformed Force. ..... 1,057 By others in the Department..... 9 By the Police Department..... 3,501 By the Fire Insurance Patrol..... 146 By the District Telegraph Companies..... 22 By householders..... 2,088 By citizens ..... 3,235 By the Holmes Electric Protective Company ...... 58 By the Public Schools..... 134

#### SANITARY STATISTICS OF THE UNIFORMED FORCE.

#### Cases of Disability.

CAUSED BY	Number.	DAYS LOST.
Injuries	168	5,520
Disease	486	8,674
Total	654	14,194

#### Examinations of candidates for appointment to the Uniformed Force—

Number	found qualified	121
Number	found disqualified	74
	Total	195

## Deaths in the Uniformed Force.

			-	-	
NAME,	GRADE.	COMPANY.	DATE OF DATE OF APPOINTMENT. DEATH.	Date оғ Death.	CAUSE.
John Hearn	Assistant Foreman Engine 52 Sept. 11, 1865 Jan. 5 Pleurisy.	Engine 52	Sept. 11, 1865	Jan. 5	Pleurisy.
John Wright	Fireman, 1st grade	3		" 24	" 1, 1869 " 24 Bright's disease.
James Leavy	" 1st grade	" 47 Mar. 21, 1866 Mar. 5 Unknown.	Mar. 21, 1866	Mar. 5	Unknown.
Frank Kelly	" 1st grade	" 37 Sept. 11, 1882 " 19 Bright's disease.	Sept. 11, 1882	61 ",	Bright's disease.
Abraham Kilsheimer	" 1st grade	1st grade H. & L. 14 Oct. 1, 1872 April 24 Stricture of esophagus.	Oct. 1, 1872	April 24	Stricture of æsophagus.
Edward W. Owens	" 2d grade	2d grade Engine 26 Dec. 17, 1885 June 15 Pneumonia.	Dec. 17, 1885	June 15	Pneumonia.
Samuel McMahon	" istgrade	,, 56	April 12, 1883	Aug. 13	56 April 12, 1883 Aug. 13 (Internal injuries, run over
Francis Egan	" 1st grade	" 28 Oct. 21, 1870 " 24 Apoplexy.	Oct. 21, 1870	" 24	Apoplexy.
James F. O'Connor	" 3d grade	6	Mar. 11, 1888	Sept. 6	6
Bernard McAll ster Assistant Foreman	Assistant Foreman	" II	Dec. 3, 1877	,, I4	Phthisis,

# Deaths among those Retired from all Service.

NAME.	GRADE.	COMPANY.	DATE OF APPOINTMENT.	DATE OF DATE OF APPOINTMENT. RETIREMENT.	CAUSE.	<b>Вате</b> оғ <b>Велтн.</b>	CAUSE.
William F. Wilson Assistant Engmeer Engine No. 5 Sept. 18, 1865 April 4, 1879 Dilated heart Jan. 12 Bright's disease.	Assistant Engineer	Engine No. 5	Sept. 18, 1865	April 4, 1879	Dilated heart	Jan. 12	Bright's disease.
George W. Quackenbush Foreman	Foreman	,, IO	Oct. 16, "	July 13, 1881	10 Oct. 16, " July 13, 1881 Chronic rheumatism Feb. 27 Heart disease.	Feb. 27	Heart disease.
Benjamin C. Deane	Fireman	15	Oct. 2, "	Nov. 18, 1880	15 Oct. 2, " Nov. 18, 1880 Near sighted Aug. 9 Bright's disease.	Aug. 9	Bright's disease.
Henry Springsteen	*	61 "	Mar. 1, 1869	Sept. 3, 1885	19 Mar. 1, 1869 Sept. 3, 1885 Bright's diseasc	6 ;	" 9 Cerebro-spinal meningitis.

#### Retired from all Service.

NAME.	Grade.	DATE OF APPOINTMENT.	RETIRE- MENT.	CAUSE.
Charles O. Shay	Chief of Department	Sept. 25, 1865	May 22	Vertigo.

#### Relieved from Service at Fires During the Year.

Name.	Grade.	COMPANY.	DATE OF APPOINTMENT.	DATE WHEN RELIEVED.	CAUSE.
Roger B. Hamblett.	Foreman	Engine No. 52	Sept 11, 1865	May 16	Heart disease.
Wright Case, Jr	Assistant Foreman	H. & L. No. 14	May 1, 1875	" 16	"
James Bergin	Fireman, 1st grade	Engine No. 10	Feb. 11, 1876	" 16	Paralysis.
William Farrell	" 1st grade	" 47	Sept. 9, 1874	" 16	Chronic rheu-
Thomas Judge	Foreman	" 15	June 28, 1866		Chronic rheu- matism.

#### APPARATUS.

#### Purchased.

The following new apparatus was purchased during the year:

Three engines (see "Description of Steam Fire Engines" in another part of this report), four four-wheeled hose tenders, two hose wagons, one top buggy wagon, four battalion wagons and one sleigh with windlass and plough.

#### Old Apparatus Condemned.

Three two-wheeled and one four wheeled chemical engines, two two-wheeled tenders and four two-wheeled jumpers, found unfit for service in the Department, were sold. One two-wheeled tender and one roller frame, first size hook and ladder truck, found unfit for any service, were broken up, parts of each being used in repairs, etc., and the remainder sold.

#### Repair Shop Work.

Manufactured—Three battalion wagons and one four-wheeled double-reel hose tender.

Rebuilt—Two hook and ladder trucks and three battalion wagons.

Extensive Repairs—Thirty-nine to steam fire engines, three to floating engines, eleven to hose tenders, sixteen to hook and ladder trucks.

Ordinary Repairs—Sixty-four to steam fire engines, one to hand engine, nine to floating engines, eighteen to hose tenders, ninety-three to hook and ladder trucks, five to water towers, and a large amount of miscellaneous repairing and painting.

Ten sets of sliding poles were put up in various company quarters.

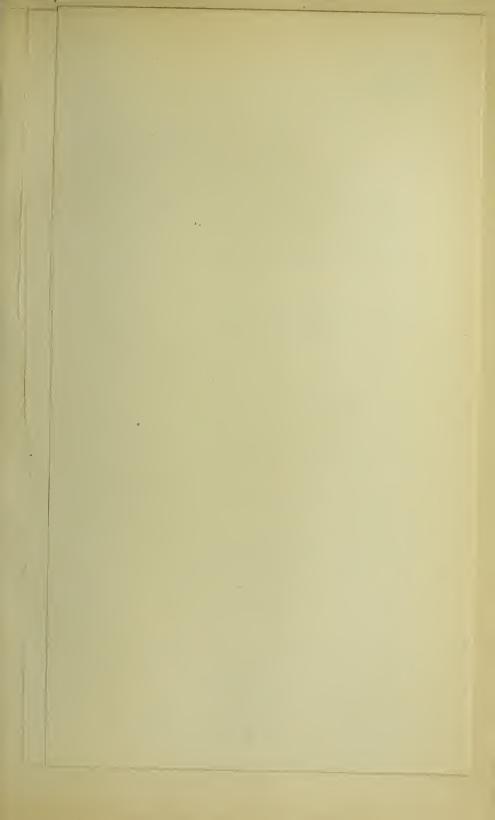
Six sets of double harness, five sets of single harness and a large number of bridles and other parts of harness were made and furnished.

The following articles were furnished to various companies, etc.:

Seventeen electric-light wire cutters, eleven Prunty patent controlling nozzles, nineteen jumping nets, three sets of scaling ladders, twenty safety ladder belts and snaps, one thousand steel hose spanners and thirty-two thousand eight hundred feet of hose.

#### Inventory of Apparatus.

		In Service.	Spare.	TOTAL.
Marine steam fire-e	engines (Engine Companies Nos. 43)	2		2
- /	First size	6	10	16
	Second size	33	12	45
Steam fire-engines	Third size	7	4	11
	Fourth size	15		15
	Fifth size	2		2
Hose-tenders, four-	wheeled	40	6	46
Hose-tenders, four-	wheeled—double reel	1		ı
Hose-tenders, two-v	wheeled	25	15	40
Hose-wagons, four-	wheeled	2		2
Water towers		2	ı	3
•	Roller-frame with exten- size	12	4	16
	sion ladder 2d size	7		7
	Goose-neck without extension ladder	ı	5	6
Hook and ladder trucks	Roller - frame, without ladders,		2	2
	Turn-table, first size	4		4
	Turn-table, second size	ı		ı
Chemical fire-engine	es		6	6
Fuel wagons		17	• -	17
Wrecking truck			ı	ı
Chemical fire-exting	guishers	133		133
Hand-engines			3	3
Hose carriages			r	ı
Hose jumpers			9	9
Supply wagon		ı		ı
Chief of Battalion w	agons	12	11	23
Portable water tank		1	ı	1



					(1	assif	(cd 1)	rescription	on of Steam Fire	Eng	THE		
		61(18 H)=		1	S(2)   	nr—	ater	3,6	Макей істінн	a'		New Boilenes 1 mps, by	
				der	In		with W.	alt or					WHERE
	Frame	le qlør	Engine	Cylinder	Stroke of Potor	dius	Foglit with	W ten but place	Name	umber	When	By Whou	Service
	<i>y</i>	1		′		-	3			ž	·	1	-
	r Bris Urnk r	Drop inte	Hont o	8	13	4% 4%	8,8co a-8,8	Sept 486		148	Nov., 1883	New boiler, Clapp & Junes Mig. Co.	Spare
	1			N.	12	4% 4%	8,800 8,800	Sept , 180 Sept - 180		191	Apr. 1883 Nov. 1877 Mai., 1881		
	1			:	12	4 54	8,8 %	Oi1 , 186	и	193	Nov. 1877 Mar., 1881 Inno, 1884 May, 1883	New jumps, Amakeag M& Cu Nen (tibes, Rejnan Shops	
	r - Straight frame	Lolmiar  Drop tube		8 81	12	4% 4%	8,8m. 9,6m	Nov., 180 Oct., 181		105 184	Feli , 1885	Altered for borses and non-hoder,	1
	"Ciane neck			231	a	415	8 %	Sept (18)		. 444	Felt, 1880 May, 1883	[Alliered for boyses and non-boder, Clapp & Jone a Manufacturing Co-Non-tibles, Reg are Shino, New Bodler, Clapp & Jone a Mig C Altered for flores, Clapp & Jones Manufacturing Co.	
1				7%	8	4 12	7 321	Mar , 185		127	Apr., 1884 Felt., 1881	Manufacturing Co. New boiler, Clapp & Jones Mig Co.	Figure 20
1		Cod Drop take		-1 <u>C</u>	8	ah ah	7 45 1	Sept. 188		351	Nu1 , 1885 Oct , 1886	New cottin houler, Alicen Mg Co New tubes in houler, Clapp & Jones E Manufacturing Co	spare.
		0			7	5	7,457	Del , 186		352	Jan 1883	New pump, Clapp & Jones Mig. Co.	lingine 31
- 1				S1,	7	\$	7,890 8,117	Inne, 488		380 181			1 14
1				811		\$	† 8g>	Aug. 18.		181			" 19.
1	Urmk	Lubular	Single	8	7	41	7.593	Sept., 198 Dec., 186		38 s			Ward's
3				8	12	4 <sup>3</sup> s	6,750	Oct., 186 No., 186		147	July, 1879 Apr., 1870	New horler, Amoskeag Mig. Co.	Suare
3				8	12	411	0.750	11ec., 186	W	157	July, 1878		
3		New tube		8	1.	4%	0,43	De , 186		158	July 1579 Oct., 1888 Nuv., 1879 1889	La France Frie Eng. Cu. Amiskeng Mig. U. La France Frie Fng. Cu. Manchesser Loca, Works Retuil and new hooler, La France Lire Frigure Cu. New Joules, Remark Shorts	Engine 36. Engine 5.
2		Nen tube		1	13	414	0,711	Jan 18/1		160	5cpt , 1870 1885	Retmit and new toiler, La France	0 18.
2		Drop tule		8	1.2	45	6,740	Feb. 18%		161	Nuv. 1874 May. 1684 Infy. 1875	" Clapp & Jones Mlg Co f	Spare
3				8	12	4 <sup>1</sup> a	6,754	Feb., 1866		162 {	Sept., 1881		
2		Tubular		8	12	431	6,750	Αμτ., 186		164 {	Dec , 1674 1489	New boiler, Repair Shops (New boiler, and retinfi by La) France Fire Fagin (New Boiler, Manifester Leo Work) New boiler, Manifester Leo Work) (Capp & Jones Ville (n Neu coil for boiler, Clypa & Jones) Manifestering Co	Engine 13.
3		Sectional confrube		8	18	434	6,750	Apr., 186		165	Nur , 1879 Aug , 1866 Sept , 1888	New horler, Mnnihester L. co. Works Chapp & Jones Mig Cu. (Nen coil for horler, Chapt & Jones	10.
2		Tubular		8	12	434	0.75	Ang. 1866		. 165	Det 18:0	Manufacturing Co J. New boiler, Amoskeag blig Co	ъраге
2	Straight frame.	Sectional coi) tube Drop tube	Double	6%	8	4 <sup>1</sup> n	6,700	Mar. 186; Mar. 180;		326 {	Sept., 1877 Ang., 1860 Oct., 1875 Apt., 1882	Clapp & Jones Mtg Co. Report Shops Clapp & Jones Mfg Co.	Ingine 28
2	0 .	e		6%	8	419	6,700	Mac , 186;		326	Inly 198 Leb 1878		11 21
3			P	67,	3	411	0,700	May, 1801		320	Aug 1886 Det, 1881	New tubes in boiler Repur Shops New holler Clapp & Jones Mig C. New Lumpi New Louis Medical Control New Louis New Boiler.	Spare 15
2		Nest tube	41	6%	8	4% 4%	6,700	Aug., 1868		275 206 {	Mar 1881 Aug. 1879 Mar. 1880	Anjoke og Alfg Co	Engine ay
2		Tubular ,,		6'1	8	413	6,700	Sept. 1819		301	Nov., 1876	" Kepan Shops	Spare.
2	Crane neck	Nest tube		6% 7%	8	414	6,700	Nov . 1868 July 1886	La France Fire   Engine Co.	303	Apr 1899 Aug 1888	Amorking Mig Co . 1 La France Fire Fing Co !	Figure 34
3		Sectional coil tube .	41	7 43	7	471	7,340	May (88)	Cuspp & Jones and Co	491			" a4.
3	" i	Dusprube		6%	8	ata ' ata	6 800	Feb., 1871 Feb., 1871	Amoskeag Mig. Co	59 360	May, 1883 July, 1884	New boiler, Clapp & Jones Mig Co	17
3				67	8	415	6,600	Mai 187		3/11	Sept , 1883		Spare
3				6%	8	41.	6,500 7,385	Mai., 1871 Mai., 1871		36a 313	April, 1883 April, 1883	0 0	Engine to
3		Tubular		624	8	415	7,230	June, 1875		1 417	Aug.,18%	New pumps, nen crown sheet, new tuber and sheet in furnace, Mini-chester Locomotive Wirks.  Rebuilt indirew toiler by La Frame Frie Engine Cro.  New boiler, Clapp & Jones Mfg. Co.	11 K
		Drop tube		639	8	4%	4.950	June, 1873		4)8	June, 1882	Fire Engine Co New boiler, Clapp & Jones Mfg Co.	. 54
2				6% 6%	8 8	41a 41a	6,950	July, 1873 Sept. 18:1		4.9	July, 1883 June 1884	0 0 0	" 13
2				6%	8	4%	6,950	5°p1 , 1873		441	Sept , 1889		1 29
2		Tubular		6 4	8 8	ala ala	6,450 6,800	Sept., 1873 N iv 1868	Could	415 } 7	May, 1882 July, 1884 Dec., 188	New pump, Repair Shops New boile: Chapp & Jones Mfg Co. Repair Shops.	Ward's
2		Coll		6%	8	4 %	6,210	July, 1883	Abrens Mkg Cu	258		New coll in botter, Ahrens Mfg. Co.	i Island Engine 13
3	"	Drop tube,		63 <sub>1</sub>	7	4% 4%	6,110	July, 1883 July, 1183	Clapp & Jones Mfg Co	380 413			11 ab
3	"		Rotary	73/2	7	451	6,485	Ang., 1893	"	415	F.1 000		** 27
2	a 11 1		Double.	9 7h	7	4 5	6,885	July, 1884 July, 1885	Silally Mig Co Clapp & Jones Mig Co	, 780 463	Feb., 1888	New pumps Silshy Manufacturing Co	" 17 " 38
2	0	Sectional coil tube . Nest tube		7.56 7.74	7	41a 415	6,740	Aug. 1886 Aug. 1888	La France Frie	473			4
1	"			734	9	415 456	8,675	Aug., 1888	La France Fire   La France Fire   La France Fire   La France Fire	146			Engine 5
3	Harp tank	Drop tube		7% : 14	9%	4% 4% [	5,550	May, 1861 Dec., 1876	Amuskeag Mfg Co.	36 516	Oct., 1829 April, 1884	New boiler, Clapp & Jones Mfg Co .	Space
3		Inbular		734	9	4 +	5,700	Feb. 1877		517			Engine 37
1		New tube		734	9	471	5,700	Feb , 1877		519		New boiler, La France Fire Engine Co. New tubes in boiler, Chipp & Jones   Manufacturery Co.	38
3	Straight Irame			7%	9	475	5 700	Fcb. 1877	. "	530	1819	Rebuilt and new boiler by La France Fire Enguir Co	37
3	" "			8	7	5	4,665 4,665	July, 1883 July, 1883	Ahrens Mig (o	354 356			11 45:
3		Tubular		6 81/	6	415		Aug , 1865	Clapp		Jan , 1867	New builer, Amoskeag Mig Co	Ramball's   Island
3				834	6	47s	7.490	1889		165			Engine 56.
3		Otop tube		8% 9%	6	424	7-450	1889	La france Fire	163			" 26
4		0	9.0	0%	6	5%	5.750 3.750	July, 1881 July, 1881	Clapp & Jones Mig. Co	359			" fo.
4				9% 9%	6	51/2	5.750	Juli , 1881 Oct , 1881		165			" S3-
4				914	6	53/2	3,300	Ort , 1881		368			11 33-
1				9% 9%	6	5 1/2 5 1/2	\$,300 \$,300	Not , 1881 Dec 1881		371			49
				9%	6	5.14	\$,950	April, 1884		430			11 18
				9% 9%	n 6	5% 51,	5.919	April, 1884 May 1884		437			11 gi.
				9%	6	5%	5,035,0	May, 1884		433			11 47 11 9
				914 916	6	5% 5%	5,950	May, 1184 June, 1884		436			11 30
	Steaught Teams			9%	6	5%	4-750	July. 1883		430			11 48
3	Crane neck			9% 7%	6	5 % 4 %	4 745 4 08o	Aug., 1883 Nov., 1882		417			'' 40
5 1	" ···· · · · · · · · · · · · · · · · ·			7% 11	6	416	2 o pa	Nov., 1884		450		New legs in builtr	11 52.
	Mazine engine	Tubular	Double		12	5 250		May, 1875	Amorkeag Mfg Co., }	513 }			11 43-
1				16	9	7%	.5	Ap11], 1883	Chippi & Jones Mlp.	405}	June, 1886	Extensive repairs in boat, under contract.  New legi in bulkers, new fresh water ranks and connections	" 51
								* Formerly	sell-propellors				

#### Inventory of Hose.

		Size.	LENGTHS.
Combination	rubber hose	2 inch.	3
46	"	21/2 "	2,173
6.6	" tapering from	3½ to 2½ "	39
66	"	3 <sup>1</sup> / <sub>4</sub> "	⊸ 56
66	"	4 "	ı
66		6 "	2
otton rubbe	r lined hose	21/2 "	1,892
46	"	31/4 "	2
6.6	"	3½ "	34
1	Гоtal		4,202

Classified Description of Hook and Ladder Trucks.

1						, ,		1			
Size,	STYLE.	600	Longes	Longest Ladder.	DER.	Manufacturer.	WHEN BUILT OR PLACED IN SERVICE.	BUILT ICED VICE.	Department Registered No.	REBUILT, ETC.	Wнеке Used.
ıst.	Turn-table	1 :	92 feet extension	extensi	on	Fire Extinguisher Manufacturing Co Sept.,	Sept.,	1588	33		Hook and Ladder Co. 4.
ıst .	:	:	85	;	÷	La France Fire Engine Co		1886	30		** 
ısı.	*	:	85	"	÷	· · · · · · · · · · · · · · · · · · ·	June,	1886	31		" 12,
ıst.	ä	:	85	;	:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	July,	1887	32		" 16.
rst .	:	:	75	;	i	, , ,	3	1888	34		., 14.
ıst .	Roller frame		73	,,	÷	Fire Extinguisher Manufacturing Co	May,	1883	24	Repair Shops, 1887	9 ,,,
Ist .	**	:	73	3	:	Fire Department Repair Shops	3	1872	28	Gleason & Bailey Mfg. Co	,64
ıst .	"	:	73	:	:	"		6281	18		., 10.
ıst.	"	:	73	2	÷	Fire Extinguisher Manufacturing Co July,	July,	1883	56		" IS.
ıst.	:	:	72	:	:	Fire Department Repair Shops		1872	13		Spare, 4th Battalion.
ıst.	:	:	72	·	:	22		1873	15		" roth "
ıst.	3	:	70	ä	÷	23	Dec.,	1869	9		Hook and Ladder Co. 1.
ıst.	3	:	70	:	÷	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Nov.,	1871	OI	Repair Shops, 1889	" 2.
ıst .	3	:	70	;	:	33 33	May,	1872	11		7.
ıst .	3	:	70	3	÷	Fire Extinguisher Manufacturing Co	June,	1883	25		6
ıst .	*	:	70	3	:	Allerton Manufacturing Co		1870	00		.6
ıst.	3	:	70	÷	:	3		1870	6	Spare 4th Battalion.	Spare 4th Battalion.

Co. 13	ý	ý	11.	20.	18.	17.	у 38.	47.	50°	52.	Co.19.	y 48.	46.		land.			s'and.
Ladder	3	3	ž	3	3	3	Сотрап	3	ž,	3	Ladder	Сотрап	"	alion.	ard's Isl	H. & L. 9.	., 19.	Randall's Is'and
Gleason & Bailey Mfg. Co, Hook and LadderCo.r3							Engine Company				Hook and Ladder Co. 19.	Engine Company 48.		rzth Battalion.	Spare, Ward's Island.	H .,	3	" R
Co 1	:	:	:	:		:	:	:	:	:	:	:	:	:	:	:	:	
ey Mfg.					Repair Shops, 1886													
ı & Bail					Shops,													
Gleasor				:	Repair				:								:	
36	7	14	19	17	12	91	27	20	2.5	29	23	21	4	3	81	35	Ŋ	I
:	1869	1873	1881	1878	1872	1877	1883	1882	1982	1885	1882	1882	1865	1865	1865	1865	1865	1865
	Jan.,					Sept.,			Sept.,	June,		April,	Before 1865	:	:	**	3	:
Fire Department Repair Shops	:					:	g Co		:	Fire Extinguisher Manufacturing Co June,	:	:	:	:	:		:	
Shops.			·	•	·		acturin	Shops.		acturin	z.	Shops.					_: _:	
Repair	3	*	:	:	\$	3	Fire Extinguisher Manufacturing Co	Fire Department Repair Shops	3	Maru		Fire Department Repair Shops		:				
rtment							guisher	rtment		guisher		rtment						
е Dера	:	•	:	\$	;	*	e Extin	е Dера	3	e Extin	*	е Dера						:
Fir							Fir	Fir	:	Fir			<u>:</u> 	:	<u>:</u>	: -:	:	<u>:</u>
•	•	•	•	•	•		·	•	•		٠						:	
3	*	3	"	*	33	*	3	3	2	3	\$	et					:	
70	65	65	65	65	65	50	20	20	δ,	20	50	50 feet	40 "	40 "	40 "	40 "	0.,	30 "
:	:	:	:	:	:	:	:	:	:	:	:	:		:	i	:	:	:
3	*	ä	:	:	3	:	÷	:	;	:	ř	3	3d Gcose neck	3	:	3	ï	÷
ıst.	ıst.	ıst.	ıst.	ıst.	ıst.	2d	2d	2d	pz	2d.,	b2	2d	3d	3d	3d	3d	3d	3d

Classified Description of Hose Tenders, Hose Wagons, Boat
• Tenders, Water Towers, Water Tank and Wrecking
Truck.

	STYLE.	Manufa	ACTURER.	WHEN BUILT OR PLACED IN SERVICE.	Registered No.	WHERE	USED
Four-wh	eel	Dep't Repair	Shops		33	Spare.	
46		66		1865	па	Eng. Co	. 38.
46.6		66		1875	35	Spare.	
46		66		1877	37	66	
44		**	•••••	1877	38	"	
46		"		1881	42	66	
46		Fire Extingui	sher Mfg.Co	1882	43	Eng. Co	. I.
×6.6		"	"	1882	45	66	21.
-≤ <b>6</b>		66	"	1882	46	"	23.
46		66	"	1882	48	"	44.
-6 G		66	. "	1882	34	Spare.	
di 6	•••••	P. J. Nevins.		1882	49	Eng. Co	. 48.
-66	••••••	J. U. Bauche	lle	1883	51	"	24.
·\$ 6		66		1883	52	"	26.
46		66		1883	54	66	36.
-6.6		66		1883	55	66	37.
-66		66		1883	56	66	42.
46	••••	"		1883	57	"	45.
-44		"		1883	58	"	47-
-44		"		1883	59	"	50.
-66		Fire Extingu	isher Mfg. Co	1884	60	"	3.
.44		"	"	1884	61	"	ro.
-6-6		66	"	1884	62	66	18.
-4-6	• • • • • • • • • • • • • • • • • • • •	••	"	1884	63	"	27.
46		66	"	1884	64	"	30.
-66		66	"	1884	65		53.
-66		66	"	1885	66	66	52.
46		Gleason & Ba	ailey Mfg.Co	1886	68	66	16.
46		"	"	1886	69	66	19.
66		**	"	1886	70	66	22.

	STYLE.	Manufac	TURER.	WHEN BUILT OR PLACED IN SERVICE.	REGISTERED No.	WHERE	USED.
Four-wh	eel	Gleason & Bail	ey Mfg. Co	1886	72	Eng. Co	34.
14		"	"	1885	73	66	39.
"		"	"	1886	74	"	40.
66		66	"	1887	76	6.6	II.
6.6		66	"	1887	77	6.6	14.
66		William Cole &	. Co	1887	75	66	45.
"		Gleason & Bail	ey Mfg. Co	1888	79	66	5-
44		46	"	1838	80	66	8.
44		66	"	1888	81	66	9.
**		66	"	1888	82	66	15.
44		"	"	1888	78	66	28.
46		44	66	1889	84	66	31.
66		66	"	1889	. 85	66	54.
46		66	"	1889	86	66	35.
46		"	"	1889	87	66	56.
"		66	"	1889	83	H. & L	. Co. 19.
Two-whe	eel	Dept. Repair S	hops		19	Eng. Co	. 2.
66		66	• • • • • • •		23	"	4.
"		66			21	66	6.
"		"			12	66	13.
66		66			24	66	16.
"		66			25	66	27.
66		66			27	66	55.
46					23	66	55.
66		"			16	Spare.	
66		66			13		
"					2?	Eng. Co	0. 12.
46					23	"	12.
"					17	66	49.
"					18	66	49.
66					11	Spare.	,,
66		Amoskeag Mfg	. Co		6	Eng. C	0. 13.
66		"			7	"	18.
66		66			8	66	49.

Style.	Manufacturer.	WHEN BUILT OR PLACED IN SERVICE.	Registered No.	WHERE USED.
Two-wheel	Amoskeag Mfg. Co		9	Spare.
"	"	••••	10	66
"	Dept. Repair Shops	1866	1	Eng. Co. 25.
	Amoskeag Mfg. Co	1866	15	" 9.
	Dept. Repair Shops	1867	2	" 5·
"	. "	1868	3	" 17.
"	Amoskeag Mfg. Co	1868	4	" 31.
"	Allerton Mfg. Co	1369	5	" 33•
"	Dept. Repair Shops	1871	29	" 12.
	"	1871	30	Spare.
	"	1872	31	Eng. Co. 7.
		1872	32	Spare.
		1876	36	Eng. Co. 26.
	4	1879	39	" 35·
	"	1880	41	Spare.
"		1880	40	Eng. Co. 29.
"	"	1882	44	" 20.
"	"	1882	47	" 32.
٠٠٠٠٠٠٠	"	1883	50	" 13.
	"	1883	53	" 33.
- "	"	1885	67	Spare.
66	"	1886	71	Eng. Co. 41.
Four-wheel hose wagons	E. B. Preston & Co	1889	1	" 38.
	"	1889	2	" 41.
Four-wheel double-reel) boat tender	Dept. Repair Shops	1889	r	H. & L. Co. 15.
Four-wheel water tower	A. Greenleaf	1879	ı	Spare.
	46	1883	r 2	H. & L. Co. 3.
"	Fire Extinguisher Mfg. Co	1885	3	Eng. Co. 7.
Four-wheel water-tank	Dept. Repair Shops	1883	ı	" 20.
Four-wheel wrecking truck	" ,	1879	1	H. & L. Co. 11.

#### HORSES.

December 31, 1888, number of horses on hand . 352	
Purchased since	
	386
Died	
Sold 16	
	23
December 31, number on hand	363
On Probation.	
December 31, 1888	
Received 109	
	120
Accepted	
Rejected	
	115
Remaining on probation December 31	5

#### DEPARTMENT BUILDINGS AND SITES.

#### New Buildings.

The new houses at No. 120 West Eighty-third street, for Engine Company No. 56, and at No. 120 East One Hundred and Twenty-fifth street, for Hook and Ladder Company No. 14, were completed and occupied.

Contracts were made for the erection of the following new buildings:

Hospital and Training Stables at Nos. 133 and 135 West Ninety-ninth street.

Apparatus House at No. 432 West Thirty-sixth street for a new hook and ladder company.

Apparatus house on the south side of West One Hundred and Thirteenth street, sixty feet west of Tenth avenue, for a new engine company.

#### Alterations and Repairs to Buildings.

Extensive alterations and repairs were made to the following buildings:

Engine Companies Nos. 8, 24 and 50, Quarters of the Chief of Department, Repair Shops, Stables and Hook and Ladder Companies Nos. 12 and 20.

Ordinary repairs, involving various kinds of mechanical work, were also made to the buildings of the Department, aggregating seventy different jobs of work.

#### New Sites.

In a preceding part of this report, under the head of "Life Saving Corps and School of Instruction," reference is made to the necessity for a new site for a drill ground. As there is also necessity for a new repair shop, which could likewise be advantageously located on the river front, it was determined to make an effort to procure a site for the two purposes combined. There is also imperative need of a number of additional companies north of One Hundred and Tenth street, where no increase in the fire-extinguishing force has been made since the organization of the Department, to keep pace with the large growth in population and buildings, and the Board contemplates early action in that direction.

#### Buildings and Sites Occupied by or under Control of the Department.

Headquarters—Office of Commissioners, Bureaus—Chief of Department, Inspector of Combustibles, Fire Marshal and Superintendent of Buildings, and Offices of Attorney, Fire Alarm Telegraph and Medical Officers, and School of Instruction, Nos. 157 and 159 East Sixty-seventh street, with drill yard in rear, extending to Sixty-eighth street.

Night-quarters, Chief of Department, No. 15 Great Jones street.

Headquarters, Deputy Chief of Department (First District), No. 155 Mercer street.

Headquarters, Deputy Chief of Department (Second District), No. 165 West Twenty-ninth street.

Repair Shops, Nos. 130 and 132 West Third street.

Hospital Stables, Nos. 133 and 135 West Ninety-ninth street (located at No. 199 Chrystie street during rebuilding of stables).

Training Stables, No. 58 Lawrence street.

66

66

Bell-tower and Lookout, Mount Morris square.

Lookout, southwest corner of Tenth street and Sixth avenue, Jefferson Market Court-house.

Engine Company No. 1, No. 165 West Twenty-ninth street.

2, No. 530 West Forty-third street. (Fuel Depot No. 13.)

3, No. 417 West Seventeenth street. (Fuel Depot No. 10.)

" 4, No. 39 Liberty street.

5, No. 340 East Fourteenth street.

6, No. 100 Cedar street.

7, No. 22 Chambers street.†

8, No. 165 East Fifty-first street.

9, No. 55 East Broadway.

10, No. 8 Stone street.

' II, No. 437 East Houston street.

12, No. 261 William street.

13, No. 99 Wooster street.

14, No. 14 East Eighteenth street.

15, No. 269 Henry street.

' 16, No. 223 East Twenty-fifth street.

" 17, No. 91 Ludlow street.

" 18, No. 132 West Tenth street. (Fuel Depot No. 8.)

19, No. 355 West Twenty-fifth street. (Fuel Depot No. 11.)

Engine Company N	No. 20, No. 47 Marion street.
"	21, No. 216 East Fortieth street.
"	22, No. 159 East Eighty-fifth street.
	(Fuel Depot No. 15.)
"	23, No. 235 West Fifty-eighth street.
66	24, No. 78 Morton street. (Fuel Depot
	No. 7.)
"	25, No. 342 Fifth street.
66	26, No. 220 West Thirty-seventh street.
66	27, No. 173 Franklin street.
66	28, No. 604 East Eleventh street.
66	29, No. 193 Fulton street.
66	30, No. 253 Spring street.* (Fuel
	Depot No. 6.)
66	31, No. 116 Leonard street.
66	32, No. 108 John street.*
"	33, No. 15 Great Jones street.
"	34, No. 440 West Thirty-third street.
66	35, No. 223 East One Hundred and
	Nineteenth street (temporarily
	at No. 209 East One Hundred
	and Twenty-second street).
"	36, No. 2333 Park avenue.
44	37, No. 83 Lawrence street.
"	38, Tenth avenue, between One Hun-
	dred and Fifty-fourth and One
	Hundred and Fifty-fifth streets.
66	39, No. 157 East Sixty-seventh street.
"	40, No. 153 West Sixty-eighth street
66	41, No. 501 North Third avenue.
66	42, Fulton avenue, between One Hun-
	dred and Sixty-seventh and
	One Hundred and Sixty-eighth
	streets.

Engine Company	No. 43 (Floating engine "William F. Have- meyer"), foot of Clinton street, East river.
46	44, No. 221 East Seventy-fifth street.
<b>\</b> (	45, North side Tremont avenue, between Southern Boulevard and
	Vyse street.
"	46, Morris street, between Madison and Washington avenues.*
"	47, Tenth avenue, between Ninety-
	seventh and Ninety-eighth
	streets.
	48, Webster (formerly Thomas) ave-
	nue, near Kingsbridge road.
"	49, Blackwell's Island.
"	50, One Hundred and Sixty-sixth
	street, between Washington and
	Third avenues. (Fuel Depot
	No. 19.)
<b>"</b>	51 (Floating engine "Zophar Mills"),
	foot of West Thirteenth street.
"	52, Riverdale avenue, near junction of
**	Westchester avenue.
**	53, No. 175 East One Hundred and
"	Fourth st. (Fuel Depot No. 16.)
"	54, No. 304 West Forty-seventh street.
	55, No 173 Elm street. 56, No. 120 West Eighty-third street.
TT 1 1 T 11	
Hook and Ladder	Company No. 1, No. 26 Chambers street.†
"	2, No. 120 East Philleth St.
"	(Fuel Depot No. 14.)
	" 3, No. 108 East Thirteenth street.
66	" 4, No. 788 Eighth avenue.
6.	" 5, No. 96 Charles street.
	J, 110. 90 Charles street.

Hook and Ladd	ler Company	No. 6, No. 77 Canal street.
"	"	7, No. 217 East Twenty-
		eighth street.
"	66	8, No. 7 North Moore street.
"	"	9, No. 209 Elizabeth street.
"	"	10, No. 191 Fulton street.
"	"	11, No. 742 Fifth street.
	"	12, No. 243 West Twentieth
		street.
"	"	13, No. 159 East Eighty-
		seventh street.
"	"	14, No. 120 East One Hun-
		dred and Twenty-fifth
		street.
"	"	15, Old Slip, between Water
•		and Front streets.
"	"	16, No. 159 East Sixty-
		seventh street.
"	"	17, One Hundred and Forty-
		third street, near Third
		avenue. (Fuel Depor
		No. 18.)
"	"	18, No. 84 Attorney street.
"	"	19, Ogden avenue, between
		Birch and Union streets.*
Fuel Depot No	. I. No. 28 l	Beaver street.†
"		Duane street.
		Washington street

- 3, No. 304 Washington street.
- 4, No. 180 Clinton street.
- 5, No. 199 Chrystie street.
  - 6 (see Engine Company No. 30).
- 7 (see Engine Company No. 24).
  - 8 (see Engine Company No. 18).
- 9, No. 106 East Thirteenth street.
  - 10 (see Engine Company No. 3).

Fuel Depot No. 11 (see Engine Company No. 19).

- ' 12, No. 160 East Thirty-third street.
- " 13 (see Engine Company No. 2).
- " 14 (see Hook and Ladder Company No. 2).
- " 15 (see Engine Company No. 22).
- " 16 (see EngineCompany No. 53).
- " 17, No. 209 East One Hundred and Twenty-second street.
- " 18 (see Hook and Ladder Company, No. 17).
- " 19 (see Engine Co. No. 50).

Store-house, No. 20 Eldridge street.

- " No. 180 Clinton street. (Fuel Depot No. 4.)
- "No. 199 Chrystie street (temporarily occupied by Hospital Stables, and Fuel Depot No. 5).
- " Division street, near Boston road.
- "No. 160 East Thirty-third street. (Fuel Depot No. 12 and Supply Room.)

Unfinished buildings for an engine company on the south side of West One Hundred and Thirteenth street, sixty feet west of Tenth avenue, and for a hook and ladder company at No. 432 West Thirty-sixth street.

The locations marked thus (\*) are leased by the Department; all others are city property. The locations marked thus (†) are only in part occupied by the Department. At the locations marked thus (||) lots in rear or adjacent are leased by the Department.

#### RELIEF FOR THE SUFFERERS IN THE CONEMAUGH VALLEY, PENNSYLVANIA.

At the instance of his Honor the Mayor, the Board authorized the circulation of subscription lists for this purpose, and the total amount received therefor was one thousand six hundred and seventy-two dollars and seventy-five cents, which was sent to the Mayor's office on June 2.

RECEIPTS AND DISBURSEMENTS OF THE RELIEF FUND—1871-1889.

## Receipts.

7	1871. Монтня.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.
Met. Fire Dept. Relief Fund	\$7,340 c7				:			:		
:	646 SI	\$621 64	\$843 3r	\$734 79	\$972 SI	\$567 IS	\$489 46	\$568 98	\$568 03	\$1,068 89
:	:	00 00I	1,060 00	374 00	:	00 001	:	00 001		:
:	:	170 63	902 34	705 00	2,389 63	1,600 00	1,925 00	1,250 00	350 00	400 00
:	25,230 00	27,528 50	30,399 50	31,827 50	29,454 50	27,285 00	30,103 00	29,750 00	30,300 00	29,760 00
	495 00	509 00	537 00	522 75	519 25	645 50	472 25	332 75	355 00	363 50
:	275 55	98 666,I	4,258 91	9,298 22	10,410 44	11.795 22	17,210 91	15,493 90	18,680 49	22,140 20
Foreign insurance tax	:	9,942 30	12,072 04	15,136 25	15,281 24	12,878 98	12,112 10	16,630 02	17,582 85	:
:	:	211 00	571 50	241 50	306 50	385 50	384 50	192 00	180 00	178 00
- <del>-</del>	:	:	:	:	:	:	:	258 00	274 00	328 00
:	:	245 co	440 00	375 00	355 00	245 00	260 00	240 00	180 co	290 co
Fires in street permits	:	:	:	:	:	50	41 75	85 00	64 00	56 50
Sales—Seized combustibles	:		24 25		:	:	:	:	6 30	10 00
:	:	:	*:	27 06	:	:	:	10 00	:	I 35
Excise licenses	:	:	:	:	:	:	:	:	:	:
Absences without leave		:	:	:			:	:	:	:
Special leaves	:	:	:	:	:	:	:	:		:
<u>,</u>	:	:	:	:	:	:	:	:	:	
New York State Dairy Commission										
Totals	\$34,987 13	\$41,327 93	\$51,108 85	\$60,242 07	\$59,689 07	\$55,502 85	\$62,998 97	\$64,910 65	\$68,540 62	\$54,596 44

RECEIPTS AND DISBURSEMENTS OF THE RELIEF FUND—1871-1889—(Continued).

### Receipts.

						V				
Front	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	Totals.
Met. Fire Dept, Relief Fund.										\$7,340 c7
Fines	\$868 8o	\$1,304 55	\$i,966 33	\$1,703 23	\$2,005 84	\$1,839 84	\$2,249 50	\$1,765 80	\$2,109 I.4	22,894 30
Donations		100 00	:	00 001	258 00	580 00	2,115 00	551 00	250 00	5,688 00
Penalties	525 00	325 co	460 00	400 00	550 00	200 00	177 5º	200 00	20 00	12,730 10
Oil licenses	31,180 co	31,270 00	32,720 00	35,270 00	36,550 00	37,100 00	39,500 00	39,510 00	41 720 03	617,458 00
Fireworks permits	409 25	440 75	462 75	513 50	583 75	620 50	627 75	880 00	I,030 CO	10,320 25
Interest	22,885 58	23,468 IO	20,347 85	24,764 43	20,567 30	20,712 94	21,711 99	23,695 21	24,290 64	314,007 74
Foreign insurance tax	:	:	:	:	:	:	:	:	:	112,635 73
Powder licenses	оэ 981	r88 oo	198 00	00 c61	oo 891	172 00	164 00	156 00	∞ 861	4,270 50
Special permits	370 00	366 00	722 co	872 00	806 00	956 00	1,068 co	1,208 co	1,498 00	8,726 00
Chimney fires	305 00	320 00	360 00	325 00	441 50	355 co	300 00	305 00	402 CO	5,741 So
Fires in street permits	65 00	63 00	59 00	60 50	05 69	00 89	65 50	43 50	31 5º	773 25
Sales-Seized combustibles	63 25	35 37	:	6 75	:	:		:	25 00	170 92
Sales—Sample oils	20 00	:	:	:		:	:		:	88 41
Excise licenses	:	:	:	:	18,397 00	62,406 50	94,684 co	78,094 00	79,952 00	333,533 50
Absences without leave	:	:	:	:	176 00	310 14	462 42	570 74	327 86	1,853 16
Special leaves	:	:	:	:	2,081 95	3,621 65	4,098 38	3,828 63	3,985 79	17,616 41
Sales—Condemned horses, e	:	:	:	:	513 90	3,114 07	2,538 75	1,320 90	2,115 13	9,602 75
New York State Dairy (	:	:	:	:	:	250 00	:	3,762 50	:	4,312 50
Permits for sale, use, etc., of explosives	:			:			:		937 00	937 00
Totals	\$56,907 88	\$57,880 77	\$57,295 93	\$64,205 41	\$83, <b>r</b> 68 75	\$132,612 64	\$169,762 79	\$155,891 28	\$159,070 06	\$1,490,700 09
						The second section of the second seco	The second secon			

## Disbursements.

For—	1871. 7 Months.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.
Premium on city bonds										
Salaries	\$5,950 45	\$12,276 86	:	.:	:	:	:	:	:	
Expense account	905 97	1,460 54	\$1,223 09	\$1,569 70	\$1,292 96	\$i,745 23	\$2,106 54	\$2,014 49	\$1,075 23	\$18 So
Pay of relieved men	:	:	:	:	:	:	:	2,199 96	96 664'1	928 31
Pensions of retired men	:	:	:	:	:	:	:	6,068 40	8,073 24	12,906 19
Pensions of widows and orphans			1,819 50	2,625 00	2,736 68	3,344 53	4,226 09	5,800 71	6,329 94	13.339 63
Totals	\$6,856 42	\$6,856 42 \$13,737 40	\$3,042 59		\$4,194 70 \$4,029 64 \$5,089 76 \$6,326 63 \$16,083 56 \$17,278 37	\$5,089 76	\$6,326 63	\$16,083 56	\$17,278 37	\$27,192 63

TOTALS.	\$2,700 00	18,227 31	13,590 41	148,504 59	408,903 58	272,427 75	\$864,353 64
1889.				\$35,209 12	48,632 80	37,249 29	\$121,c91 21
1888.		:	:	#28,250 80	52,264 38	34,424 II	\$114.939 29
1887.	\$2,700 00	:	73 56	23,134 33	55,755 19	30,261 94	\$111,925 02
1886.		:	:	\$17,636 20	56,958 68	28,707 58	\$103,302 45
1885.		:	:::;	\$9,838 58	55,550 15	25,116 27	\$90,505 00
1884.		:	\$26 8 <b>5</b>	10,427 46	44,274 59	23,133 65	\$77,862 55
1883.		:	\$19 25	10,789 04	24,018 17	20,369 40	\$55,195 86
1882.		:	<b>\$38</b> 50	7,432 54	23,190 or	17,561 27	\$48,222 32
1881.		:	\$20 00	858 29	21,211 78	15,388 r6	\$37,478 23
For—	Premium on city bonds	Salaries	Expense account	Pay of relieved men	Pensions of retired men	Pensions of widows and orphane	Totals

## ecapitulation.

Delance or hand December 31, 1889	
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#### Receipts and Disbursements of the New York Fire Department Life Insurance Fund, 1871 to 1889.

RECEIPTS.		
1871	\$5,040 00	
1872	7,773 00	
1873	8,789 00	
1874	6,395 00	
1875	12,508 00	
1876	11,074 00	
1877	8,965 00	
1878	9,241 00	
1879	9,293 00	
1880	9,640 00	
1881	10,333 47	
1882	10,917 34	
1883	11,747 15	
1884	12,845 59	
1885	13,113 93	
1886	17,686 53	
1887	19,521 07	
1888	19,764 79	
1889	16,828 00	
Total receipts		\$221,475
DISBURSEMENTS.		
1871	\$5,000 00	
1872	6,000 00	
1873	9,000 00	
1874	5,000 00	
1875	14,000 00	
1876	8,000 00	
1877	8,000 00	
1878	3,000 00	
1879	9,000 00	
1880	12,000 00	
1881	10,000 00	
1882	15,000 00	
1883	9,000 00	
1884	13,000 00	
1885	19,000 00	
1886	17,000 00	
1887	20,000 00	
1888	21,000 00	
1889	16,000 00	
Total disbursements		219,000 00
Balance on hand December 31, 1889		\$2,475 87

#### NEW YORK FIRE DEPARTMENT LIFE INSURANCE FUND.

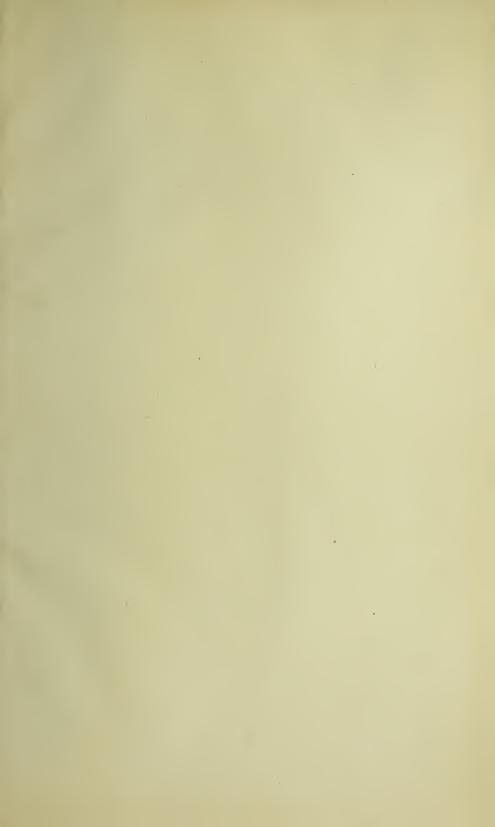
Dec. 31, 1888	Balance on hand		\$1,647 87
Dec. 31, 1889	Receipts:		
	For assessments	\$16,828 00	
			16,828 0
		1	
Dec. 31, 1889	Disbursements:		\$18,475 8
51, 1009	To widow of John Hearn	\$1,000 00	
	" " William F. Wilson		
		1,000 00	
	George W. Quackenbush	1,000 00	
	John Wright	1,000 00	
	administrator of Frank Keny	1,000 00	
	" James Leavy	1,000 00	
	" administratrix of Patrick J. McEntee	1,000 00	
	" widow of Abraham Kilsheimer	1,000 00	
	" " Edward W. Owens	1,000 00	
	" " Samuel McMahon	1,000 00	
	" Benjamin C. Dean	1,000 00	
	" administratrix of Francis Egan	1,000 00	
	" widow of Henry Springsteen	1,000 00	
	" "Bernard McAllister	1,000 00	
	" " James F. O'Connor	1,000 00	
	" " Patrick H. Stewart	1,000 00	
			16,000 0
	Balance		\$2,475 8

Very respectfully,

HENRY D. PURROY, S. HOWLAND ROBBINS, ANTHONY EICKHOFF,

Commissioners.

CARL JUSSEN,
Secretary.





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